RAILROAD

MAGAZINE

FEBRUARY

25¢

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TOM SAID "NO" HE'S STILL WAITING FOR "LUCK"
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SAME OLD GRIND -- SAME SKINNY PAY ENVELOPE -- I'M JUST WHERE I WAS FIVE YEARS AGO
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Broadcasting stations, Aviation and Police Radio, and other Radio branches are scrambling for Operators and Technicians. Radio Manufacturers, now working on Government orders for Radio equipment, employ trained men. The Government too needs hundreds of competent civilian and enlisted Radio men.

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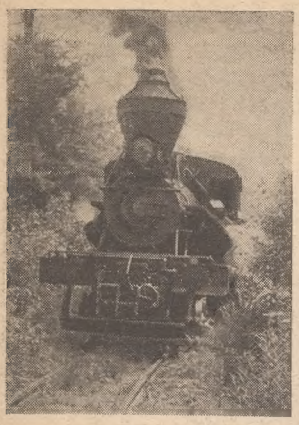

RAILROAD MAGAZINE

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Less Than Carload Lots

FIFTY YEARS of railroading never took Harry M. Ruggles more than 33 miles beyond Chicago. Harry began switching for the Burlington in 1894, the year of the Pullman Strike. Progressively he rose to yardmaster, G.Y.M., trainmaster, and then Assistant Superintendent of the Chicago Division, from which he recently retired. Unlike most brass collars, who have worked on various parts of the system, Harry confined his activities to the 33 miles between Chicago and Aurora, Ill.

However, this division has nearly 350 miles of track, including spurs and sidings. It serves 500 firms and industries, and handles an average of 175 main-line train movements daily, besides heavy commuter traffic, also much freight switching and transfer operations. Thus the 33-mile stretch embraces nearly every phase of railroading. Which recalls a famous comment: "If you are tired of London you are tired of life, for there is in London all that life has to offer."

* * *

FOUR months after an Army lieutenant lost his suitcase while traveling from Miami to Salt Lake City by rail, it was restored to him, although the only clue was an unidentified portrait of his girl friend left in the bag. The photo bore the words, "Underwood & Underwood—Philadelphia." A Pullman claim agent took the picture to the U&U section of Wanamaker's main store in Philadelphia. There it was identified as that of a young woman employed in the store.

* * *

COWS just don't like to walk across bridges. They stampede, bellow and refuse to budge. No coaxing can change their minds. Recently, a herd of 92, driven from a ranch on the Fraser River near Clinton, B. C., for shipment to Montreal, balked at the Thompson River bridge in Ashcroft. After vain efforts to force a crossing, cowboys reluctantly gave in to the stock and, altering their plans, shipped the herd by Canadian National Railways—four cars, each holding 23 head.

Previous attempts to drive cattle over Ashcroft bridge had ended in injury to the animals, who evidently were frightened by the thunder of hooves on unfamiliar planking.

* * *

IDENTICAL TWINS, both Air Corps sergeants, Robert W. and Charles J. Morrison, long separated, are now happily reunited, according to the *Louisville & Nashville Magazine*. This was brought about by personal intervention of President Roosevelt. The soldiers are natives of Louisville, Ky., and nephews of Charles F. Kaelin, L&N freight claim agent. After Army induction they were sent to separate posts; but their mother persuaded the President to reunite them, on the ground that identical twins suffer the same aches and pains and it works out best all around if they are kept together.

* * *

HENRY J. KAISER, wizard shipbuilder, plans to enter the railroad field. As soon as the war ends he aims to start making cars of new steel alloys, aluminum and magnesium, the work to be done in yards which now build Liberty ships. This move would meet a double need, he says; rolling stock for railroads and postwar jobs for workers. Some of the proposed equipment would be super-fast streamlined coaches so light that one engine could pull twice the number now generally used. Others would be lightweight freight cars that Kaiser claims could handle the Nation's freight at twice the present speed and about half the cost. New Diesel engines also are on the drawing-boards. If and when Kaiser turns from ships to railroads he will be following to some extent the footsteps of Commodore Vanderbilt.

* * *

HIGHEST recorded Victory garden is that of C. J. Ownsby, agent for the Laramie, North Park & Western, a branch of the Union Pacific, reports R. H. McConnell, Hayden, Colo. The vegetable patch is located at Walden, Colo., 8,200 feet above sea level, 187 feet higher than Sherman station, the UP's loftiest point.

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City.....*State*.....*Present Position*.....

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I FIRST pulled out of the roundhouse when I was twelve years old, working for the Canadian Pacific Railway as callboy at Brownville Junction, Maine. Today, thirty-nine years later, I'm still with the CPR in Maine, only seventeen miles west of the home terminal. Boy and man, I've been railroading all this time, if you'll let me count the four years I spent with the Canadians in World War I doing my best to wreck the Kaiser.

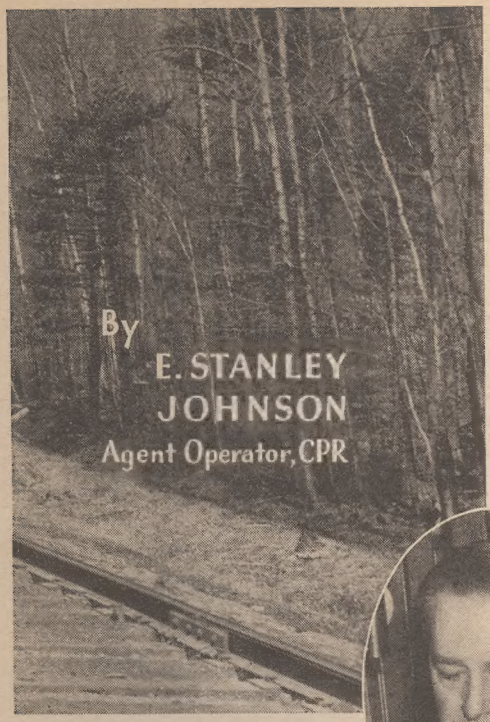
Railroading on a single-track main line is a grueling business; I've seen strong men crack up under the strain. I'm therefore pleasantly surprised to find myself past the half-century milepost, with all wheels on the rails and plenty of grit in the sandpipes. There may be some rust in my tubes, but I'm here to show you there's enough steam in the old boiler to blow my whistle!

For more than half of my time with the Canadian Pacific, I've held down the one-man agency here at Onawa.

Is anybody asking, "Where is Onawa?"

If so, I can answer that one easily; it is just about the exact geographical center of the state of Maine. It may surprise you to learn the Canadian Pacific runs through part of the United States, but it has since 1889. You see, Maine juts into the Dominion, and the CPR cuts right across it on its run from Montreal to Saint John, New Brunswick. Onawa is on the main line, near Brownville Junction, the eastern terminus of Moosehead subdivision, which begins at Megantic, Quebec. Moosehead Lake, known to sportsmen for its fine fishing and hunting, is seventeen miles west of us; the village itself is on the shore of Lake Onawa, which we call the most beautiful in the whole world, full of land-locked salmon and square-tail trout, and surrounded by mountains, big game and summer cottages.

As Maine leads the nation in potato production, perhaps it is not scraping a spud too fine to say that Onawa is an eye in this huge potato state. It's an eye through which I've seen the way to things vital in



my own life, and it is showing important things to people thousands of miles away in war-troubled Europe.

some straight track. For instance there's Caribou Straight, only six miles east, all of three quarters of a mile long. It helps to make up for some places like Smoke Alley, and that zig-zag stretch we call Snake Alley. Up here, as we say, an engineer can look at the back of his neck without half trying.

Yes, it's single track, up hill and down dale and around the corner, with fast freights and passenger trains puffing and roaring in opposite directions all the time. And minding this single track, with only part of it protected by block signals, and all the rest of it guarded by human vigilance alone—that's a man's job.

When I pulled onto the Canadian Pacific at Brownville Junction, I was only twelve years old—too young to have my name on the regular payroll. I can still see that little tow-headed chap who trudged along, not so bravely at first, doing better than fifteen miles on an average night in all sorts of wintry weather. I had to call up trainmen who lived all over town, many of them a

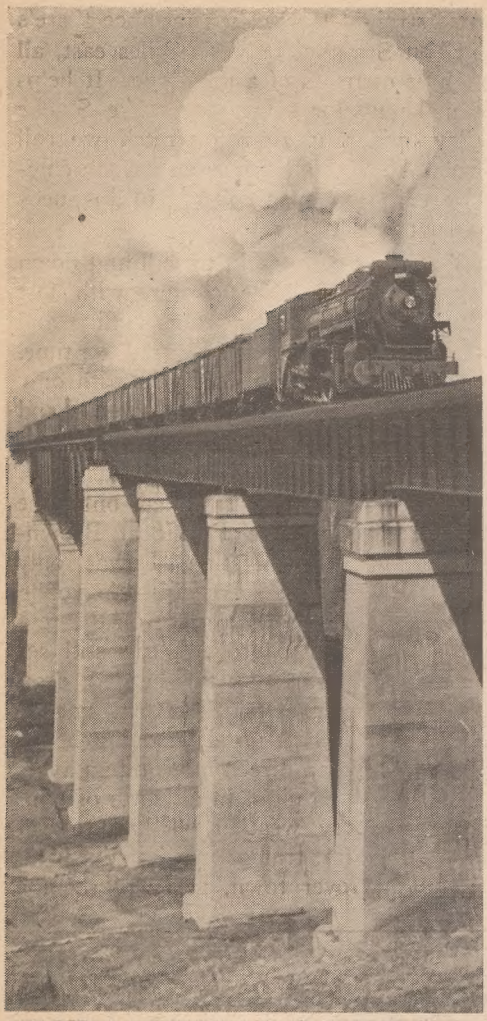
My Job Is to Keep Canadian Pacific Traffic Rolling Across the State of Maine

For the window of the station office where I am sitting is only ten feet from a strip of track that is an indispensable weapon in Canada's fight. Every hour of the day and night a good share of the Dominion's war production that has been loaded into the barrel of the CPR is shot past that window, zipping along toward its target in Berlin.

We have nothing but single track and it's about as tough a piece of steel as ever hatched out of a rolling mill. In fact, throughout its entire route in Maine, the CPR is like a giant jig-saw line. Curves go through cuts so high and narrow that an engineer is like a one-way submarine with a fixed periscope. Oh, we do have

mile away from the station. I'd hurry through the dark freight yard, between long lines of cars, gripping tightly the bale of my little birdcage lantern that threw such a dim shadow on the dirty snow. I worked twelves hours a night, and seven nights a week. Every other week I shifted over to day duty, and worked twenty-four hours straight through from 7 p.m. Saturday to the same time Sunday. This would be balanced by a twenty-four-hour lay-off the following week when I resumed night work. My salary was fifteen dollars a month, which seemed plenty to me then.

A call boy gets to see a lot of the seamy side of life. I learned to keep my eyes wide open and a brake on my lips. I soon



ONAWA TRESTLE, built in 1930, is one of the two largest on the CPR in Maine

knew every engineman, trainman and switchman on the division. In some ways I knew things about them that their mothers never knew.

I actually found time to go to school during my first three years as callboy; how I managed it, I don't know, but it didn't seem so hard then. I finished three years of high school, and started the last, but as you'll see, I was getting pretty busy on the railroad by then, and did not have time to graduate.

I'd recommend the job of callboy to anyone who wants to get right to the heart of a railway. I learned a thousand important things about practical operation as I listened to the men talking shop.

Whenever I had any spare time I'd hang around the form clerk. I helped him with his train forms, and I learned how to figure tonnage and make up switching lists for the yardmen. He had an important job, and actually got thirty-five dollars a month. He was a big shot in my eyes.

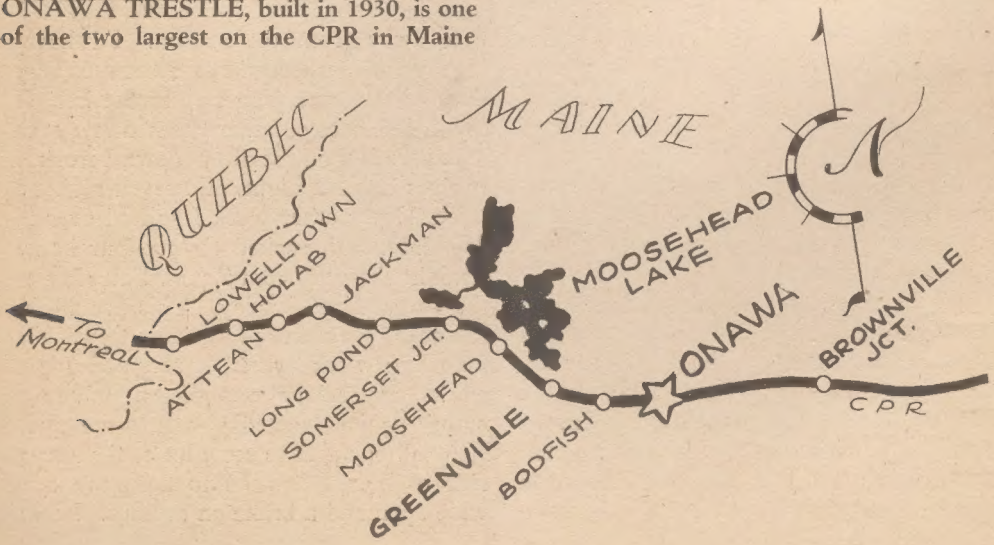
One day the form clerk took sick. I went after his job like a Hellcat after a Zero. Agent "Sandy" Burpee, now Superintendent of Transportation, was dubious and he questioned me sharply.

"You're only fifteen, son?"

"Yessir."

"You think you can handle the job?"

"Yessir."



Sandy looked at me a long time, and I looked right back at him, for I knew there wasn't another man available.

He was more than a little doubtful about it, because it wasn't a spot for a kid, but he decided to give me a trial. When the form clerk didn't come back, I really had the job and I hung onto it.

Two years later when the night agent popped off, I stepped into his place. My wages soared to forty-five dollars and I was on my way up the ladder.

I began to learn how to bill freight, and discovered the fascinating mysteries of classifications and rates and routings in the huge tariff books. I hung around the office, and had a key and sounder at home where I practiced. By the time I was eighteen I was a good telegrapher, but there was a CPR rule in those days that no man, not even a cocky young Canuck named Johnson, could be a train-order operator until he was nineteen. I chafed under this rule, but Dave Ryan, trainmaster and chief dispatcher, had his eyes on me, and the day before I was nineteen he told me that I'd celebrate my birthday by going out on the line in the kind of job I wanted.

So on the twenty-third of January, 1912, the most glorious day in my life, I became a full-fledged train-order operator at Lowelltown, Maine, ninety-four miles from Brownville Junction, and only three and a half miles from the boundary between Maine and Quebec. The thrill of my new responsibility was heightened by another wage increase, this time to fifty-six dollars monthly, while my duties multiplied like rabbits in April.

My biggest job, naturally, was copying and delivering the train orders that came over the wire—a job where one small error may mean a coroner's inquest and staggering damage suits. But I had a dozen other tasks to perform: tending the

RIGHT: One quarter of a mile west of Onawa, trains thread this deep rock cut

BEAUTIFUL Onawa Lake, full of landlocked salmon and square-tailed trout, is surrounded by mountains, wild game and sportsmen's camps

THIS LITTLE DEPOT did a million-dollar business in 1930

semaphores, and keeping the lights in them and the train-order lamp and the switches burning. I had the pumphouse and the tank fires to keep going, tickets to sell to passengers, and bills for freight shipments out of a sawmill town that buzzed with business. I took to the work like a deer to salt. There was a real future for me on the railway, I thought, and I learned all I could about the duties of a station agent.

So when the winter rush was over I headed down the line, going as relief agent and operator to various stations—Holeb, Jackman, Long Pond, Somerset, Greenville, Brownville Junction, Lake View, Seboois, and Onawa itself. These were mostly sawmill towns, as rough and tumble as any in the old west. Today Lowelltown, Long Pond, Somerset, Lake View and Seboois are ghost towns. But thirty years ago things were different. Everything was red-blood, red-eye, and hard sinew. Hardly a day passed when I didn't have to eject a drunken lumberman from the station. Three times I was shot at—once point blank. An ex-pug hanging around Greenville had given me some lessons in boxing, and I could take care of myself. I wasn't exactly a little fellow,

since by this time I was husky and weighed around one eighty.

I was getting along fine, learning to railroad, and I felt I was going places.

THEN in 1914 my mother died. This was a hard blow for me, and when the war began soon afterwards, I enlisted in the Canadian Army, partly out of restlessness and a desire to get away from the old familiar home scenes. My brother Bob, three years my junior, who had followed me as callboy and form clerk, came along a few weeks later and joined up with the same regiment, the Fifth Mounted Rifles.

We had some pretty tough going in the next four years. My brother was wounded five times, and I was blown sky-high by a shell at Vimy Ridge.

We returned to the CPR in 1919. Both of us won medals and I, the gamest gambler I ever knew, for the curly-headed V.A.D. nurse who had been so kind to me in a London hospital took a long chance and married me.

In 1921 I came to Onawa, with my wife Nel and our year-old son Herbert, and here I've stuck like a glue-bellied leech ever since.

What happened to the ambitious young fellow of 1914 who was so sure he was going right up to the top? Well, he learned that a man doesn't have to go places to find contentment and a job that will absorb the best he has in him. I can tell you this place seemed like a spot out of heaven after the filth of the trenches and the stench of death.

The best piece of good fortune that ever came my way was worth getting blown sky-high for. It was worth everything—anything. For if it hadn't been for the war, I never would have found my wife, who in so many ways has helped to make this spot in Maine a source of real contentment for me. Besides that deeply important fact, she's just about the best assistant an agent-operator ever had.

When I am off duty, attending to the many outside activities I find to do, Nel has often taken train orders, stopped trains, or otherwise stepped into the breach to help a harried dispatcher out of

MIXED TRAIN rumbles by the telegraph bay. Note order-board levers attached to casement

a jam caused by delayed trains. If I am called for duty at night, and that happens often during the winter months in bad weather, Nel is out of bed and right behind me. While I'm busy with the dispatcher, getting lined-up on approaching trains, she checks the train-order signal to see if it is burning properly, sees that I have hoops to hand up form 19 orders on the fly, and lights my red and my white lanterns. By the time I get myself and all the trains oriented, I smell coffee brewing in our kitchen back of the office (we live here in the station dwelling during the winter). She's real stuff, and I thank God for giving me such a wife.

If this sort of life hadn't seemed important to Nel and me, our son Herbert would not have had this beautiful Maine country to call home. He has heard the clickety-click of a telegraph sounder day and night since he was in diapers. He knows railroading well, and has often helped me with tickets and all the multitudinous duties of a one-man agency from being janitor to looking up tariffs. We're pretty proud of this six-foot athlete son of ours, who enlisted in the U. S. Navy as a seaman two days after he was graduated from the University of Maine. He's an ensign now—and a handsome one—after seven months in the Aleutians and officers' training at Northwestern.

WINTER comes early and stays late in my part of the country, and that's one of the added features that makes single-track railroading a tough job up here. Around Brownville Junction they tell a story that indicates pretty clearly the kind of curves and cuts we have and the depth the snow can reach.

Back in the not-so-good old days of "binders", a freight train pulled into

Brownville on a snowy night in midwinter, after a regular run that had seemed just like any other. But when the yard clerk looked over the string of cars, one was missing. Switch lists were consulted, the train crew questioned, but that car had simply vanished, and it wasn't the van at the tail end, but one of the boxcars sandwiched in the middle!

Not until spring was the mystery solved. A melting snowdrift revealed the missing car lying in a ditch beside the right-of-way, slowly pushing its way through the white blanket it had been hiding under for weeks. When the freight train hurtled around a curve, the couplings had broken, and the car had jumped the track; somehow the two parts of the train jiggled themselves together again, without any of the crew knowing what had happened.

Stations that may look like sleepy little outposts from the window of a speeding train can be hotspots in any-season, especially along a single-track main line. I've handled some heavy jobs in my time. Lowelltown and Jackman, Greenville and Somerset Junction were busy places, but I could count on a few trained men to help. The telegraph job at Brownville Junction was a stiff grind, but right here in Onawa, ordinarily just a good one-man daily chore, I had the biggest job of all. The gross earnings of this station jumped to better than a million dollars one year, and except for some green clerical help for a few weeks, I handled it alone.

The big rush came in 1930, when the company decided to build new bridges through Maine. The ones at Onawa and Morkill (a flag station I look after) are the largest on the CPR line in this state. When construction began in June, the boom really started. Everything had to be brought in: hundreds of carloads of gravel and cement, lumber, steel, contractors supplies, donkey engines, steam shovels, cranes. With the equipment came several hundred bridge workers, many of them with their wives and children, descending like locusts on this little eight-family village. It was a stunt, and fun.

An eight-family village sounds like a quiet place, but a man can be as busy as a bird-dog at a station where all the jobs are his. Then, too, there are the extra activities that I've been roped in on—everything from helping to deliver babies, no less than fourteen of them, to serving as selectman, health officer, and constable in this district at various times. And anybody who knows New England will tell you that you don't have to travel to meet unusual or interesting characters. The people I've bumped into have helped to make this job at Onawa as interesting as it has been.

Sticking close to business, I think first of old "Punk" Kielty, probably the most cross-grained son of a railroad tie I ever met; his ghost will smirk with pleasure, which is more than he ever did, when I describe him. Fiction writers could use Punk as a model for the toughest, sourest, gloomiest old trainman they ever need to tangle a plot with. He was a boomer until he decided to settle down at Brownville Junction, where he worked for many years as switchman, brakeman, and conductor. He ruled his crew like the boss of a prison gang, and as long as I knew him, he never went out of his way to make a friend on the division.

Punk was anti-social, on general principles. Once, to settle an argument with a brakeman, he picked up an air-hose, coupling and all, and laid the poor fellow out so stiff that it took weeks in a hospital to soften him. Punk cared for nothing except the railway and his job with it. When his train left the yards, he knew what every car contained, where it was shipped from and where to, who sent it and why.

Bill McNeil was a horse of another color—or without any color, you might say. He was an odd fellow for an Irishman, quiet, almost studious, with just one remarkable characteristic. Bill's memory was as spectacular as an exploding rainbow. He had a brain like an adding machine. He could check a thirty-car freight from memory. I used to watch him walk down the length of a train, glancing at

CURVE AND FILL, between Onawa and Moosehead Lake. The Canadian Pacific operates 197 miles of line under its own banner in the State of Maine

the number, initials and tare weight of each car as he passed. Then he'd saunter back to the yard office, and without any written memoranda, he would enter those thirty cars in the right order with the correct numbers, initials, and weights.

These boys are only two on a list that would include a whole string of cinder-smudged oldtimers. There's "Old Man" Finn, agent at Lowelltown when I was a young op, and Bill Walsh of Greenville, a couple of iron-fisted fellows who thought nothing of wrapping a poker around the neck of any lumberman who got too smart. "Hap" Pierce, for years a pumpman and mason for the road at Onawa, who got his nickname because just about everything has happened to him, is another. And finally, there's H.W.L., dispatcher at Brownville; when a better DS is made, Harry W. Law ought to be called in to okay the blueprints.

THE PEOPLE I've known and the things I've done here at Onawa make up one side of life along a single-track main line in the heart of the Maine woods, but it is the railroading angle that has always come first with me.

Topmost in the mind of every agent-operator is the need for being absolutely on the job, to avoid those close calls and near-failures that can haunt a man's thoughts for days afterwards. I know what it is to have my heart thump in sudden panic when I imagined I had overlooked a train order, or when a freight came roaring by the station and I figured the engineer hadn't seen my stop signal. I've seen a main-line meet so close that only inches separated the two engines.

One of the scares that still raises goose pimples all over me happened a few years ago. It was a stormy night and a light engine had been sent from Brownville Junction to assist trains east from here over Onawa hill. This pusher helped one heavy freight over the hump and then returned and entered the passing track, stopping opposite the watertank a hundred yards east of my station. At Brownville Junction, the pusher had received work orders between Onawa and Benson, four and a half miles east of here, but had rights over nothing but extra trains.

The dispatcher called and told me that a freight, Number 84, was out of Greenville seventeen miles west of Onawa and would not stop at my station for a push, as it had a light train of important freight and could get over the hill on its own power if it had a good run through Onawa township.

I naturally expected the engineer of the pusher to come to the office, as I had my west-bound board displayed at stop, but the snow was blowing and drifting so hard that I decided he couldn't see my red light, for he didn't appear. So I started down to tell him that Number 84 would be high-balling right through. As I walked down the platform I heard the pusher engine making steam, and I thought sure she was coming to the office. Then I was almost paralyzed with fright, for I saw the engine coming out onto the main line. At the same moment I heard Number 84 whistle for the mile board. Waving my lantern and hollering at the top of my voice, I ran as hard toward that pusher as I ever ran in all my life.

The engineer didn't see me until I got right beside the cab window. He was sighting to stop the tender at the tank spout, and the fireman was on top ready to grab the cord to take water.

"Get into clear!" I yelled, "Eighty-four is coming!"

He wasted no time. I saw his white face bob as he jerked the lever. It seemed to me that his only chance was to go right on down the main line, and pick up speed enough to keep ahead of the freight whose headlight was already flickering on the rails at the west curve four hundred yards away.

But no, he stopped at the switch. The fireman jumped down and had the switch over in a jiffy. The pusher got into clear, and the fireman closed the gate behind it, just as the full glare of Number 84's light hit us fair, and the freight train roared past just about three seconds later.

Why didn't I try to stop her? Well,

before I could have gone half way to the west curve that train would have been right on top of me. You can't stop a fast-moving freight train quickly. She'd have been into that pusher if that engineer hadn't moved fast when he heard me yell.

I gave him hell. He thought all trains coming east would stop here to be assisted, he said, so he had taken a chance.

ONE of the biggest mistakes I ever made didn't affect a train, but is probably the cause of many of my gray hairs.

One summer afternoon not so long ago my friend Bud Lunnin, signal maintainer, stopped his motor speeder in front of the station, and asked me for a line-up on east-bound trains. There was nothing coming before Number 908, a fast freight, and she had been one hour late out of Megantic, the division point, just 100 miles west of Onawa. So Bud figured he had time to make Greenville and I watched him speed away alone on his little motor car.

Suddenly but not quickly enough, I remembered something. The freight was double-heading through to Brownville Junction and had only a single train. Normally, being an hour late from Megantic would make the train about an hour late into the Junction, but with two engines and a light string of cars it would make up time. I called Greenville, intending to get a message to the engineer telling him to look out for a motor car on its way to Greenville and to keep eyes and whistle wide open until it was met.

Fred McCarthy at Greenville answered, but I had just started my telegram when he broke in and told me the freight was out of Greenville only twenty minutes late. There was nothing I could do, for there is no telegraph office between Onawa and Greenville. I felt sick, and I went across the track and into the woods. I got down on my knees and I prayed.

When the train whizzed by, I looked for wreckage on the cow-catcher. I asked Fred to send a man over to Bud Lunnin's home to see if he had reached there. After a bad half hour, I heard McCarthy's signal on the wire; he called to say that he had gone over himself and found Bud okay. He had stopped at a blind rock-cut to listen for a possible motor car coming, and he had heard the freight in time to pull his car off the tracks.

I've got a full train of recollections, but I think it's time to get around to the one thing everybody is always asking me about, that railway men talk about when they gather together. I mean wrecks. I also mean some of the ways we avoid them. There's no luck about it. Apart from that vital form of accident prevention called inspection—car inspection, track inspection, signal inspection, watch inspection, eye and ear inspection, material inspection—the most important feature of safe railroading on a single-track main line is dispatching.

Now a dispatcher can't help it if a hogger ignores a warning flag by the tracks, or whips past a board set

THE AUTHOR calls Greenville, first telegraph station to the west

against him. He can't help it if a hotshot jumps the rails. Nor is it his fault if a rear shack forgets to close a gate after his train had gone into the hole. But what a dispatcher can help doing is mixing up his train orders that are issued to operators all along the line. The thought of a lap order is a torment in the back of every dispatcher's mind.

Next in importance to the dispatcher comes the operator. I know that if I make a mistake on one single numeral, or fail to check the other operators as they repeat, my job can be turned into a discharge, and I can turn lives into deaths.

SON Herbert Johnson, before his promotion to Ensign, U.S.N.

Accuracy under pressure—that's the absolute requirement all day every day. When you realize that as many as fifty orders are often delivered to a single train on its hundred-and-seventeen-mile run from Megantic to Brownville Junction, you can see the chances for error and the need for alertness. I've come to the conclusion that railroading isn't second nature to an experienced man—it has to be first nature.

Despite unceasing vigilance, wrecks do and will occur on every railway. Some are tragic and terrible—some are no more than minor mishaps—some are even funny. But the very thought of a mistake has put deep lines in the brow of every dispatcher and operator.

The kind of wreck that no amount of ingenuity can circumvent is illustrated by a story told to me by a good friend, who is an expert on railroading.

A boy wanted a job watching a railway crossing. He was told he'd first have to take an examination.

"All right. Fire your questions."

"Very well," said the examiner, "here's a problem. Suppose there were two trains travelling on a single track toward each other at sixty miles an hour. What would you do?"

"I'd blow my whistle as a warning," the kid said without hesitation.

"But suppose your whistle was plugged?"

"Then I'd wave my red shirt."

"Fair enough," persisted the examiner, "but suppose it was night?"

"That's easy. I'd wave my lantern."

"Yes, but suppose there was no oil in your lantern. What then?"

The boy thought a moment. "In that case I'd holler for my sister."

"Your sister? What's she got to do with it?"

"Say, mister, d'ye think I'd want my sister to miss the greatest wreck in history?"

Well, I think that boy's sister would have come pretty close to her ambition if she'd been in Onawa some years ago.

IT WAS a bitter cold morning in December, 1919. A happy crowd of English travellers, after a rough voyage across the Atlantic, are on their first lap of the railway journey that will take them all the way from Montreal west to Vancouver on the Pacific Coast.

All Maine is buried under crusted snow-drifts. Third Number 39 whooshes by Onawa, and disappears around the curve into the gray west of early morning. Jim Burnett, the operator on duty, watches the red tail-lights whirl out of sight and reports them by at 7:11 a.m. Nobody knows it, neither sleeping passengers nor wide-awake Fred Wilson at the throttle, but that train has just two minutes to make eternity.

For meanwhile, like thunder rolling down from the west, a train is pounding eastward along the frost-bitten single track. It is second Number 82, coming as fast as wheels can turn, for Engineer Bill Bagley expects in a couple of minutes to take the hole at Onawa to clear fourth Number 39.

Why fourth instead of the third section? This is the inexplicable mystery. The

third section of the fast passenger train is completely forgotten by every member of that freight crew—not only by Bill Bagley and Hutchins, his fireman, but by the head brakeman, and Conductor Ike Manuel. It is a once-in-a-lifetime case of mass forgetfulness, for there is no fault in the dispatcher's orders, as proven at the formal inquiry later.

At 7:13 (the time shown on Bagley's watch) the thing happens, a mile and a half west of Onawa on a blind curve. There is an explosion like the sound of cannon-fire, a rending of steel and wood and glass. There is a twisting and shuddering of inanimate things turned animate—of living things turned lifeless. At the same instant all the wires along the line go dead. There is complete silence for a moment. Then from that silence, like banshees out of hell, rise the shrieks of injured and trapped passengers.

Needless to say, both engineers and firemen, and nineteen passengers are killed instantly, several others died shortly afterwards. Besides some seventy more were injured, many of them gravely.

I was working at Greenville when this happened, and as the grim details were told me later, I was shaken. My first impulse was to quit my job, then and there, for this was a horrible object lesson of

HEY! Which way to the diner? Erie Pacific 2927 barks cheerfully through New York State's southern tier, with nine cars of baggage and mail cut in ahead of her passenger consist. Pin-up girl on this month's cover, she was rebuilt in 1940, at which time a cast-steel engine bed and disc-centered drivers were applied. New tender carries 16,500 gallons of water; 24 tons of coal

Photo by Vic Neal, Wellsville, N. Y

what one little error; one little lapse of memory, might lead to. But sober thought convinced me that it was for the avoidance of such a tragedy that I had been trained. The safe movement of traffic over a single track line is a challenging job, and I decided to stick with it.

The years have crowded each other like sections of a wartime manifest since then. Busy years, and quiet ones, preceding the unparalleled traffic rush that has come with this second world conflict. Today, perhaps more than ever before, I find myself thankful for my decision. For it's a satisfying feeling that I have a share in the mighty transportation setup that is bringing us every day nearer to final victory. Victory as majestic and vast as a sunset over the wooded mountains of my adopted state.

"The World's Greatest Travel System"—that's the CPR slogan I work under; more than twenty thousand miles of trackage helps to justify that boast. My own small part in that vast net-work of rails is played on a main line probably little known to Americans; it's a coincidence that I, a Canadian by birth but now a naturalized citizen of this country, should work on one of the CPR's two routes in the United States.

I like the peace and the quiet of these pine forests, but I thrill to the sound of a locomotive whistle at night that starts up the loons from Lake Onawa with wild, eerie cries. Would I live it all over again, starting as callboy and sticking to a one-man job in this out-of-the-way Maine country? There's a one-word answer: yes, every day in the year.

The Return of Eddie Sand

EDDIE SAND said lazily: "Mister, it must be tough to have to work for a living." He stretched his slim hard length on a long canvas chair and assembled that part of the Sunday paper which Walley Sterling had cast aside.

Walley, like an overstuffed mattress overflowing another reclining chair, said he wouldn't know about that.

"I always avoid toil whenever possible," he added, opening a fresh section of the paper and eyeing it with drowsy distrust.

It was a peaceful spot to which these two ex-railroaders had retired from the twisting boomer trail. The roar of rail traffic had never disturbed the ancient quiet of these benign mountains. White

By HARRY BEDWELL

Southern Pacific Agent-Operator

sunlight edged the black shade of great pepper trees that reached out from all sides to protect the rambling old house from the sun.

You'd never believed these two drifters would have isolated themselves here, if you'd known them when they ranged the rail lines of the continent—two light-hearted lightning slingers forever on their way to somewhere else.

"The trouble with work, though," Walley decided, with a tinge of resentment, "is that it sometimes sneaks up on you."

His companion, too, was slightly disturbed. Maybe both of them felt the tight, fretful feeling that had crept over the high skyline into their placid valley. It wouldn't be the old restless boomer urge to be on the careless road again.

Eddie let his eye wander over their calm domain. Jose, their hired man, had

"BET you're the new agent," a thin voice said

milked the brown cow and was now leading her to pasture. Maria, his wife, was busy in the kitchen. Old Pat Bishop, the hogger who'd made his stake out of the same hole in the ground that the two boomers had taken theirs, was expected down from Los Angeles, with his family.

"This is one sweet spot," Eddie murmured, switching on the radio.

Music of an orchestra lilted into the crisp air and hung there under the ancient peaks like an elfin spirit straying through the white sunlight, friendly and gay. It wove itself into the texture of the high peace, and it painted bright, clean pictures against the quiet mountain walls. It made you dream of all the things that life could mean.

Then the music snapped off with a metallic click. A sharp voice cut in:

"The Japanese aerial attack on Pearl Harbor continues, with machine-gunning of civilians in the streets."

Eddie felt the tight constriction under the ribs that used to come in a crisis when the hotshots got tangled. Walley's bulk swayed forward.

The saw-like voice rasped: "It is reported that the battleship *Oklahoma* has been sunk. But there is no verification of the rumor that Japanese troops have been landed on the island."

The brittle sunlight broke into a long, shattered silence. Slowly their eyes turned from the radio. Walley smiled his utter contempt.

"The damn fools!" Eddie said quietly. Then, after a long pause: "I guess you know what that means."

Walley grunted. The years had registered on them both. But how much? Could they step up to the hot pace that the new war would certainly demand of the high iron? He gazed unhappily at the red setter that lay curled beside his big feet. One of those feet was wrapped in thicknesses of gauze. Walley liked to hunt, with red Mike for companion. Despite his bulk, he could skip over the rough country like a goat. But a treacherous rock had turned under him and smashed his foot. He'd not walk without crutches for a long time. Ordinarily, he took such a thing lightly, but this time it had edged his temper.

"All we ever learned about railroading," he complained, "ain't worth a damn. Telegraphing now don't mean any more than if we'd learned to write backward. They all do their train dispatching by phone, when they don't use CTC, and they've got women operators handling the train orders. We sure picked the wrong trade to be any good to our side in this fight."

Eddie listened in silence.

"There was a time," Walley reflected wistfully, "when I could meet 'em and pass 'em without getting them in the ink."

He was boasting that he'd always been able to dispatch trains so expertly that he never delayed them enough to have it mentioned on the morning report to the General Manager.

"But I guess them days are gone forever, so far as we're concerned," Walley added despondently.

Eddie aroused himself. "Don't count *me* in on that."

"Listen, Mr. Sand, you've been out of it so long, and things have changed so much, they'd run over you and flatten you out if you even made a try. Why, you haven't got enough telegraphing left in your system to copy a ten-word train order in twenty minutes."

"Says you!" Eddie snapped back, and looked out far across the valley. It was a big world out there, all full of trouble and gone to pot. And he'd been out of circulation for a long while.

EDDIE didn't sleep well that night. And he didn't eat much breakfast next morning, which probably accounted for the empty feeling in his stomach as he eased his car from the drive onto the steep twist of the country road. Sure was a wrench to shove off from that haven, with its memories of long, untroubled days. He glanced at the little group on the rock terrace—Walley, Maria, Jose and the red setter. He gave them a quick wave, and let his car take the swooping twist of the mountain grade.

He hadn't touched a telegraph key since

he'd quit. He considered in sudden panic that Walley might be right, and that all he'd ever known about it had oozed out of his system. He dug into his mind trying to remember the way the sounder made those metallic letters. But somehow they wouldn't form. Maybe he'd better let it ride. He checked the car and almost turned back at the bottom of the first grade.

Then he remembered the voice sawing out of the radio. Those war-makers of Japan and Germany would challenge your right to go out looking for the kind of job you wanted. They'd try to make you do it the way they said. He set his car into a swift pace down the open highway.

The city was a madhouse. Eddie had forgotten that urban folk hurried and jostled and scrambled through life. But he soon found the division Superintendent's office on the fifth floor of a downtown office building. At a broad counter he made a mild inquiry. Were they hiring any operators?

The girl arched him a look. Operators? Eddie found he'd have to be more explicit. Telegraph operator, he put forward diffidently, with the faint feeling that maybe the breed might now be extinct.

"Oh, certainly. Telegrapher."

"Well," Eddie admitted vaguely, "yes."

The girl vanished. A bland clerk came immediately. He said they were hiring telegraphers, and if he could run a station, so much the better.

Eddie said he'd once ran a station. "But look," he explained cautiously, "I haven't done any railroading for a long while. I've likely got just about enough left in my system to hold down an OS job that's not too hot."

The clerk said those things usually stuck with you all through life and into old age.

"Anyhow," he nodded amiably, "we'll see what you've got left."

He led Eddie gently down the hall to the telegraph room. The boomer felt lost in that vast space, with its atmosphere of close concentration. In all that labyrinth of rows on rows of machines there was little evidence of telegraphy as he'd known it. Sounders murmured from one lonely, two-sided table that held only a half-dozen instruments. The remainder of the room was taken up by strange machines—vicious-looking brutes that looked as if they'd bite you. Eddie walked warily.

The clerk introduced him to an operator with a square, pink face, and quick, dark eyes who studied him sharply. They sat him down at the telegraph table and told him to copy from a softly babbling sounder.

Eddie took pencil and paper. He squared himself at the table and listened intently. And then, racing down through the years, came that faint smother of panic he'd felt as a young ham taking his first test for a regular job. The strokes of the sounder beat impotently through the curtain of time.

At that critical moment the experience of the years deserted him abruptly and fled into the far outer spaces. The chatter of the instrument was muffled and meaningless. To his horror, he couldn't find a single familiar note in all that contorted ribbon of sound. It was just gibberish. He had the gone, helpless feeling of trying to comprehend an utterly foreign language. He couldn't understand a word of it.

THE pencil waggled in his fingers. He tried to concentrate intensively. The incoherent brass tongue stuttered on, but the trickle of sound wouldn't penetrate the fog of confusion in his mind. Walley's predictions and his own worst fears were facts.

He became conscious through his bewilderment that the operators about the table had stopped work and were watching him with odd, distorted expressions. He was sure giving them a laugh. The man supervising the test leaned over him.

"What's the matter, brother?" he asked with sarcasm. "Can't you get started?"

Eddie let the pencil slip from his fingers.

"Mister," he said plaintively, "I guess I never was a lightning slinger. I must have just dreamed it up."

He stood on his feet. It didn't seem possible that a brass pounder who'd worked the hot relay jobs and sat at the dispatcher's table couldn't copy Morse any more. But there it was. The lazy years had blunted his craftsmanship, dulled his mind. Walley had been right. They were just old folks.

The operator grinned at him. "Yeah, it sure gets away from you in time. These old-timers come in here, all hopped up about how good they used to be, and then they find they've mostly lost it. Funny how it seems to dribble out of your system when it's not used."

Eddie felt as if old Father Time was chasing him down a dwindling trail at high speed. The taste of utter defeat puckered the back of his tongue. Hell, it hadn't been so long since he'd read those stuttering sounders as effortlessly as the spoken word. He sure must have decomposed quickly during those placid years.

The circle of watchful faces around the telegraph table came out of the haze. Plenty derisive. These old boys were getting a bang out of this. The one with his hand on a fancy purple bug—a girlish sending set with lucite knobs—looked vaguely familiar. He'd be Nibs Spence from back there in the desert days, except for about twenty pounds added weight around the middle and a shocking lack of hair on top. And that shriveled face showing over the top of a "mill" from behind huge glasses. That might have belonged to a guy named Gid Camack, back there on the Rio Grande, except that Gid then did have enough hips to keep his pants up. This bird had to wear gaudy suspenders.

They were all looking at Eddie like he'd escaped from the zoo. They seemed to be wondering when his keeper would come and take him away. The boomer found that his knees wanted to sag. He had a great desire to sit down. But he wouldn't weaken before these slugs. He managed a stiff grin.

"Sure was mistaken about myself," he admitted, and tried to turn away jauntily.

They nodded solemn heads, like a circle of mechanical toys set to nod at the touch of a spring. Eddie disliked them heartily. Resentment burned through slowly and cleared his mind. An insistent familiar whisper penetrated the tumult in his mind. There must be some fraud here.

A corner of his mind caught the smooth chant of clear Morse rippling from the sounder next to the one he'd been trying to copy from—letters flashed into clear words that ran on through clean-cut phrases and complete sentences. The operator who was sending that stuff was sure going to town. It was as plain as print and as fast as lightning. And with a numbing shock Eddie realized he was reading every word of it.

This didn't add up. He turned back to the first sounder. It still babbled in an unintelligible sprawl.

Eddie leaned over the second resonator, then slipped into a chair as the dancing words leaped at him clearly. He picked up the pencil.

"Let's try this one," he murmured.

CONFUSION and clatter of the big room backed away into far corners. The glum and staring faces faded beyond a distant horizon. His head seemed to cut into the clear current of that operator's swift and accurate send. The message plunged to the signature, and another began. Eddie's fingers caressed the pencil.

He was long out of practice, and his hand was stiff from fixing fences down on the ranch. It had lost some of its old cunning. He couldn't now write at that swift, looping pace it takes to copy "with a stick." Words got ahead of him and he couldn't quite make his fingers catch them up. But he got most of it down in good, fair script, right down to the final sig.

It was slightly dazzling, after his dark defeat, to realize that he might be a little rusty in his craft, but that it was mostly there to be brought back into the old form. He looked around the circle of faces.

"I guess," he said softly, "that I once upon a time might have done some telegraphing, at that."

"Yeah," the square-faced op admitted dubiously, "looks like you must have."

Eddie looked at the other sounder with loathing. The circle of solemn faces sud-

denly writhed into fiendish grins. Then all those repulsive telegraphers rose up and fell upon him with shouts of ribald laughter. They pounded him on the back and crowed and bleated with glee, till the wire chief came from his cubicle and told them harshly to shut up and go to work.

The man with the girlish sending bug and the twenty pounds added weight thrust out a hand. "Eddie," he chortled, "don't you remember me?"

Sure enough, it was old Nibs Spence from out of the desert days. And the shriveled wreck grinning behind moon-sized glasses couldn't be anybody else but Gid Camack, come down off the Rio Grande. They ignored the wire chief and rode Eddie right down the line, without mercy or restraint. They'd sure made a sucker out of him somehow.

"Look!" he pleaded with them at last. "What goes on here? What in hell did you do to me?"

The goblin face of Gid Camack cracked wide open. "Walley Sterling telephoned us from the ranch this morning that you'd be showing up here, and we'd better give you the works before you moved in and took over." Gid cackled shrilly. "And did you fall!" he whooped. "That face of yours looked like something they'd swept out after the party was over."

Eddie looked at that first sounder and shook his head. "I don't get it."

"See that operator over there in the corner sending on that portable set?" Gid pointed. "The guy that's laughing at you? He was sending to you on this wire —just a mess of sounds that he couldn't read himself."

Eddie cursed them plaintively. Picking on a poor guy who'd patriotically come down out of the hills to get this war organized and won for them before they'd gummed it all up.

They hooted him derisively. Then Nibs Spence held up a fat hand for silence. He dug out a badge as large as a dollar. It was striped in silver and gold and a dull gray color. Across it ran bold letters,

You're sure in line for shaving joy
When you use Thin Gillettes, my boy!
These blades last long—four cost a dime—
You look well-groomed, save dough and time!
Top quality
at rock-bottom price
Gillette
BLADES
4 for 10¢
Produced By The Maker Of The Famous Gillette Blue Blade

OSMG. Ceremoniously he pinned the thing on Eddie, like a military decoration, and then he tried to kiss him on the cheek, French fashion. The boomer avoided that.

Nibs proclaimed solemnly. "Eddie, you are now a member in high standing of the Old Soft Metal Gang. All of 'em's got silver in their hair, gold in their teeth and lead in their pants. It's an association of old-timers who've brazenly hobbled back into service, after bein' gone for many years, and've become obnoxious to all. We don't expect much of you, because it wouldn't do us no good. But don't go telling us how much better you used to do it in the good old days. Now, go on down to the foot of the class."

THE forms and applications you had to fill out—the questionnaires designed to uncover your past—were more complicated than of yore. The book of rules had grown to four times its old size, and Eddie Sand studied it with some misgiving. The operating rules were expanded and amended. The most puzzling change he encountered in his hurried review was that the engineer didn't whistle for the board any more. Of olden times they not only had to whistle for it, but they frequently had to blast a sleeping operator awake to get it. But Rule G was still in effect.

Down in the yard, in the trainmaster's office, Eddie encountered a swarm of the Old Soft Metal Gang, pouring in to "take the book" and go back to railroading again—men who'd quit the road to "go into business for themselves," running small stores or crossroads service stations, some who'd been forced into other lines by the depression, men who had retired with good incomes. There were enginemen, trainmen, "snakes" and what have you. Most of them as dubious of themselves as Eddie was, but all were eager to be back on the high iron, to shove along the war effort and to hear again the sharp, swift chatter of running wheels under them.

Eddie stared. The railroads were sure rolling 'em high if they needed all this additional hired help.

They ran him through fast. While the rest of the OSMG sat at long tables and wrangled over questions and answers, and Eddie was taking time and care with his replies, an assistant trainmaster leaned over his shoulder.

"I've just had a look at your record," he remarked, "and I'd say you needn't take much time with that thing. Just run through and jot 'em down, and let's get going."

Eddie considered that suspiciously. Why me? he puzzled. For no apparent reason he remembered a certain burly figure with a marauding stride that he'd encountered in the hallway—the one who looked like he might be the ghost of Buck Barabe, an old brass collar Eddie used to work for. This job might end up in more than the boomer had expected.

He had his watch inspected, and went back to the office, all cleared for a job.

That sly and cheerful clerk leaned on the counter and said Eddie was to go to Norwall as relief agent. At once. The agent had been taken suddenly sick, and the station had been kind of running itself for some days. Could Eddie get on his horse and ramble right out there and start things going?

The old-timer hesitated. Norwall, he knew, was on a branch. All station work, and lots of it. He'd pictured a job on some second or third trick on the high iron in a train-order station, where the crowding traffic kept you engaged but not extended.

"It's just a small station," the clerk wheedled, "and anyhow you won't be there long. The regular man's got influenza and'll be back shortly. Just keep the door open till he returns."

"Okay," Eddie agreed, reluctantly. "It's your railroad. I'll do my darndest."

He drove to Norwall, forty-five minutes by the highway. That ancient station had been built not later than the '80s. It looked as if it hadn't been painted or repaired since. He went inside and met the familiar smells of old dust and musty records that swept him back through the years to the scores of depots he'd served in. This one didn't seem different.

Desks and counter were cluttered with the familiar litter of an unkempt station. A pipestem figure dangled in all directions from a rickety chair. Eddie studied it anxiously and decided he'd come upon an enigma. The figure was adorned with cowboy boots and levis, and a mammoth sombrero, the garb of cattlemen. But the creature was reading—and so absorbed that he'd missed Eddie's entrance—a copy of the current *Railroad Magazine*.

Eddie gave that riddle a whirl in his mind. But it didn't add up. He'd sure come back to a fantastic world, where cowmen inhabited depots and read railroad literature.

He made sharp sounds. The man suddenly assembled himself and peered at him out of sharp little eyes. His face was thin and at odd angles and adorned with a rat-tail mustache.

"Bet you're the new agent," a thin voice declared. "Funny what fellers they send out here to run the place while old Whipple's rasslin' with them flu bugs."

EDDIE didn't like the high-piping tone of ridicule. "How many relief men have been out here since the agent's been off?"

"You're the fourth'n," the gaunt man squeaked. "Fust'n stayed two days and give her up. Next'n run around here like a chicken with its haid off fer one day, then didn't show up next mornin'. T'other'n, he looked around fer 'bout a hour, then he went back to town. Mebby you want to beat the record and go back without lookin'. She's a rip-snortin' job now the war's come."

"Now, who'n hell are you?"

When the beanpole stood on his feet, his legs were bowed to cowboy standard.

"Me?" he chirruped. "I'm Gabby McCue, the Western Union messenger and freight wolloper and swamper-upper." He became suddenly fervent. "Alers did want to railroad," he babbled on, "ever since I was a kid. Tried time and ag'in to git on brakin' or firin', but they said I'd never growed wide enough. Had to stick to cattle. Figger now I was lucky when that hoss dumped me on my haid and they sent me down here to the 'sane 'sylum."

Eddie took a slow, dry swallow. "They let you out of an insane—out of a state institution to go to work here?"

"Yep!" Gabby nodded. "Found out I didn't have enough brain to addle much, and turned me loose. So that hoss that pitched me over the moon sure done me a favor, fixin' me up so I could work for the railroad. Nobuddy'd ever told me you had to go to a 'sylum fust."

"A good railroader," Eddie sighed, "doesn't necessarily have to be absolutely crazy. But it sure helps if he is."

He sorted unrecorded waybills from the confusion on the agent's desk.

"Suppose you show me around."

They went out into the sunshine, where a half-dozen trucks were backed up to a string of cars on the house track. Men, mostly big and heavy-boned, unloaded feed in sacks, and bales of hay.

"Furriners," Gabby piped. "Cow-milkers. This here community is full of dairies."

Eddie sorted waybills, checking them against the car numbers. He frowned at one, and then looked at the huge slab of a man who was unloading the car.

"This your car of alfalfa?"

The man stared down at him with distrust. "You t'ink I unloat it if it vasn't?"

"Could be," Eddie nodded. "It's billed shipper's order, which indicates it isn't yours till you've paid for it. Have you got the original bill-of-lading?" he asked.

The man pondered. "No, I haf not. I vill get it ven I go to der bank."

"Yeah, but you should have gotten it before you opened the car."

"I ship lots of cars by your railroat. I am resbonsible. I vill get der pill ven I haf time."

Eddie took another glance at the waybill and asked, "Your name Shulberger?"

The man nodded.

"Taken out your first citizenship papers?" Eddie inquired.

"Vy do you vant to know?" the dairyman asked warily.

"You're a registered alien, then."

"It iss none of your pisness."

"Okay for that," the brass pounder nodded. "Now listen closely. It's not only against the rules for you to start unloading a shipper's order car before you surrender the bill-of-lading, it's also against the law. Railroads have been fined in court for letting it happen."

"I vill get it in time." Shulberger spoke defiantly.

"Right now," Eddie contradicted. "Before you unload any more, step over to the bank and take up the bill."

He continued down the string of cars, checking numbers.

Gabby raised a high cackle. "They's used to that 'peasement stuff. Fust time a agent has got stringent with 'em. Always before they hauled by truck. Now, account of gas and rubber, they got to ship by rail, and they act like we ought to give 'em ever'thing, includin' the locomotives."

They turned back at the end of the string. Shulberger still unloaded alfalfa. He stared down at them with dull truculence.

"Gabby," said Eddie sharply, "slide that car door shut, then get a seal and sealing iron from the station. We'll seal it up till he gets that bill-of-lading.

Shulberger's eyes pinched down into a hard squint. His big hands gripped the hay hooks.

"You vill not shut my car," the dairyman bawled, waving the hooks at Eddie.

"Why, goldurn his furrin hide!" Gabby chortled as he braced himself on his high heels, and shoved. The big door slid jerkily.

"Shtop it!" Shulberger bellowed.

Gabby lunged as the door stuck. It inched forward. Shulberger pranced uncertainly as the doorway narrowed. He lumbered inside the car and stood there, confused.

"Hep!" Gabby grunted and shoved.

"You cannot lock me in mine own car," the dairyman howled.

"The hell I kaint!" Gabby yelled back.

The door began to close smoothly. Shulberger squeezed out through the narrowing crack.

"Seal her up!" Eddie ordered, and Gabby spraddled away across the yard.

Shulberger got slowly down from the truck. He glowered in silence. Apparently there was something destructive in the cool glint of the boomer's eyes that he didn't care to challenge. He put his hooks on the truck and rolled away down the street toward the bank.

EDDIE crossed over to the string of cars on the team track, and into a less alien atmosphere.

An A-frame hoist pulled gas engines from a car and snugged them onto a truck. Further along, a big crane had tied onto a steel vessel that weighed twenty ton, nestled in a gondola. The crane tested the lashings, then lifted the big piece clear and gently lowered it onto a low, multiple-wheel truck. At the other end of the string, an automobile car had its entire end open to expose a machine like a refined boiler, horizontal on oaken skids. Another huge truck was backed up to the wide opening, and its winch was dragging the machine aboard.

"It's fer one of them sympathetic rubber plants they're buildin' fer Bill Jeffers," Gabby chanted.

Eddie glanced at the waybills. The cars were consigned to the Defense Plant Corp. and were covered by Government bills-of-lading, and the waybills were endorsed "War Materials." That kind of gave you a whiff of battle. Down there in the country, you heard only the brawlings in Washington, which was discouraging. Here, they were really doing something about it.

Eddie moved in closer to watch the quick efficiency with which these riggers handled heavy equipment. Suddenly he became aware of two men converging on him, moving with quiet determination. They cornered him by the clawing A-frame.

"Lost something here?" one inquired. "Or just looking?"

The man was brisk and rugged and light on his feet. The other, covering his left flank, was a little man who also moved fast. A rigger came down from the car door in a cat-like drop. He was lean and

tough, and he had big wrenches draped about him from loops in his overalls. He looked to the little man as if for orders.

You could feel the air tighten up. Eddie knew he'd better talk fast.

"I'm the relief agent here," he said quickly, "just checking the yard. I hope I don't intrude."

"Brother," snapped the first one, his words coming like bullets, "we don't like strangers messing around here, but we've been waiting for you." He took Eddie's elbow in a strong hand and they headed for the station. "There's a little trouble and we need your help."

"Wouldn't I know it!" Eddie mourned. "Railroading hasn't changed a bit."

In the cluttered office they gave it to him straight out. One of the strangers introduced himself as Mr. Hutton, head maintenance man for the company building the defense plant. It was his duty to have the machinery and material and equipment on hand when the construction engineers called for it.

"Since the regular agent's been down, we've had a helluva time with your railroad." Hutton thrust a stout finger at Eddie. "Those guys they had out here before you didn't talk my language. I've done enough business to know if the railroad doesn't have a dependable local agent to pull you out of transportation holes, you're sunk. I'm depending on you to keep us going—like it or not." He flipped a thumb at the little man. "This is Clarence Crum, but don't let the name fool you. He's boss rigger, and anything he says, leave it lay as he puts it down."

Crum had started out being small, and the fifteen years he'd spent in the tropics, erecting oil refineries, had boiled him down till he seemed to rattle around in his clothes. You wondered how that wisp of a guy could boss a crew of riggers, lusty and headstrong, men used to the daily hazards of placing huge pieces of structure in the exact spot they were intended to go, whether it was deep underground or high in the windy atmosphere. Then you got it. You sensed the power of Mr. Crum in the flat, stone-gray eyes that could instantly judge stress and strain, and the tired voice that reached down inside you when he spoke.

"It's up to us two," Hutton took up his machine-gun chatter, "to get the stuff into the plant and erected. We've not been doing well lately, all on account of your railroad not spotting the cars for us. It's up to you to see it does. We're fitting this plant together—and doing it right now!"

Eddie nodded. "Okay," he said. "I'll have 'em set for you."

VAGUELY it drifted to Eddie's out-of-practice ear that the telegraph instrument was sounding a call in that hopeless way which indicated the operator had been doing it a long while and was about to give up. He must be calling Norwall.

Eddie answered, and for an hour he struggled with an ancient typewriter as he copied a string of Western Union telegrams. When he had finished, Gabby folded the messages, stuffed them into envelopes. Then he clattered out and sprang on his bicycle as if he mounted a fractious bronco.

Eddie looked at the untidy office, seeking a place to take hold. He scratched over the litter of reports, unfiled tariffs and bulletins, unanswered correspondence and blank forms that had been hauled out of their proper places and added to the mess.

Time became a blurred tangle you fought hopelessly to catch up with, and never did. It was like fumbling through an endless gray fog, trying to put your hand on the hundred disorderly details that had to be disposed of daily. But it seemed he'd lost the knack of doing his chores on the run, shooting each item as it appeared, like a clay pigeon. In those other times, running a station had been a cinch. Now, as the days staggered by, he got the sunken feeling that he'd never be able to master this one.

There were new arrangements that the war had put upon the railroads. The ODT was in charge. It issued directives. The roads were again being master-minded from Washington. And, mister, you had to watch your priorities and permits

to ship; who loaded which with what, and where the hell it was going. Eddie left the office only long enough to get an amount of sleep to enable him to start the next hectic day.

Daily the branch local, powered by an old switch engine and an ancient coach for caboose, prowled in to pick up the empties and to stuff the sidings with more loads. Gabby made it a point to be on hand then, to help with the switching. He swarmed over the cars like a squirrel, giving signals, making cuts and couplings, playing at being brakeman.

Eddie's critical eye caught from the car-record book that the dairymen were taking their own sweet time unloading, although rolling stock was an item in the war effort that the railroads were short of. As Shulberger was head man among the non-English speaking milk producers, Eddie read him a brief and pungent declaration of policy. Hereafter, they were going to unload their cars within two days, the day the car was set and the next. If they didn't do it that way—Eddie made threatening sounds and gestures.

Shulberger muttered and thought it over darkly for two days. He came back to grumble obscurely. Eddie pried the gripe out of him in small chunks. Shulberger wanted to know, since the railroads were in such a blazing hurry to get the cars unloaded, how come they took so long to get them out from town, only twenty-three miles away?

Eddie studied the man bleakly. Shulberger flinched under the harsh gaze, shuffled his feet, mumbled some more and went out. These blamed foreigners, trying to wedge in with their counter-complaints so as to break you down! The boomer checked back on his waybills. To his surprise and chagrin, he found that the big lunk was right. It usually took three or four days to move the loads that short distance. He'd have to back down and check up.

By the end of the first week, Eddie felt as if he were in a dark pocket filled with sharp objects. There were no Sunday trains on the branch. He worked through the Sabbath, uninterrupted by phone or telegraph or patrons at the counter, and he succeeded in getting the litter cleared away, and forms and reports stowed in their proper places where he wouldn't have to dig for them when required.

MONDAY morning, he was all set to catch up back work, when Hutton erupted upon him. There was a carload of pipe and fittings out of St. Louis ten days ago—car CB&Q 130984. He wanted it right now. Otherwise, construction would be held up. He'd himself got a report that the car had passed through El Paso five days ago. What was the delay?

Eddie took to the company telephone. It was a ten-party line, and you had to get in on that when somebody was just through and before someone else could wedge in. Eddie hung on and babbled when he could.

He wasn't familiar with the setup and wasn't sure who he should call. A clerk in freight traffic, who was new and ignorant, gave him a bum steer.

He tried the yard office. Those guys were overworked and hard-boiled. The garden bulged with twice the traffic it was intended to handle. Life there was an uninterrupted brawl. A country agent, calling to trace one lousy car, created violent reverberations. The yard office came back at Eddie with sound and fury. Who did he think he was?

"Just one of the Old Soft Metal Gang," Eddie chirped, "come back to help keep 'em rollin', like it says in the posters. Now," he asked politely, "do I get a line on that car?"

The reply was ominous.

"We got a few million cars kickin' around this place," the yardman scorned, "and you want me to find you one lone 'Q' box and hurry it over to you."

"That's right," Eddie agreed. "It's important to the war effort, they tell me."

The yardman howled. His feelings had been pent up, and he blasted like a Mallet on the hill.

"If you old has-beens," he burned out at last, "with all that lead in your pants, had only stayed on the farm and not come back to gum up the works, we might get

some place with this damned war effort."

Eddie's temper let go. Joyously he threw everything he had at the yardman. He hadn't forgotten the explicit verbiage he'd acquired back there along the boomer road. Someone with a harsh, authoritative voice was trying to break in on the line. Eddie became lurid with condensations so he could say most of it before being interrupted.

"Hey!" the yard office interjected in sudden, dazed respect, "who'd you say this was? What's your name?"

"It's Eddie Sand, spelled the easy way, if you want to make something out of it," he blazed. "But it's the CB&Q boxcar I want now, and you'd bloody well—"

A deep, sullen voice cut in on the line and made it rumble: "That you, Eddie Sand?"

"Yeah, that's me."

"What," demanded the morose voice, "have you been doing since I saw *you* last?"

The voice brought something out of the drifting years that made Eddie cautious.

"What've I been doing?" he inquired plaintively. "Why, just as damn little as I possibly could."

"You're not doing that now!" the transmitter slammed back, and then you could hear the receiver at the other end hung up violently.

The guy was right, but the startling part about it was that it sounded remarkably like old Buck Barabe. But it couldn't be. The Old Man's heart must have liquidated him by now, as Eddie had once predicted, or else the law of age limits had caught up with him. All the same, it made you apprehensive that Barabe's ghost was haunting the line.

He wasn't left to speculate on that, for the yard office had suddenly turned affable. What was the number of that car again? Yeah, sure. Hang on and he'd see what they could find out about it. Just wait a minute.

Eddie blinked. Sure changed rapidly from storm to sunshine.

The yardman came back on the line. No. No record. Try Colton, he advised. Mebby it'd come in through that yard and been turned over to the Pacific Electric to bring in. They had to make some screwy moves now to keep 'em rollin'. . . Sure, call any time. Glad to help.

"That being the case," Eddie moved in quickly, "how's it you take three, four days to get cars out here that 've been loaded on one of your industrial sidings? I'm speaking of this cow feed we get so much of out here."

Eddie had an idea and he threshed it out amiably over the phone.

"They're loaded at those grain companies' plants on this side of town," he explained, "so why not, instead of running them through your main yard, just have the switchers kick 'em into one of those sidings you've got up at that end of the branch, and let the local pick them up there?"

The yardman said it sounded all right.

Eddie called Colton. That man was brisk and factual, and he curled Eddie's hair with the events he uncovered. Yeah, the car had been in the yard, but the waybill had got separated from it, and it'd been returned east on the Union Pacific as an empty. Yesterday. It was likely up around Las Vegas by now. . . . Defense plant stuff? Yeah, he'd turn her around and hike her right back the second he could get his hands on her.

Sure made you feel like you were working on a very fast merry-go-round. Now, he'd have a job keeping Hutton's shirt on till the car came back.

AND then, with a shock, the boomer realized that Christmas had crowded into the calendar just ahead. Express shipments multiplied and the flood of telegrams swelled. Train travel became a nightmarish problem. From the 15th to on past the end of the year, you had to make reservations before you could board even the lowliest coach train. Space was allocated 75 per cent to men in uniform, and the remainder wasn't nearly enough for the civilians who wanted to be away from home at holiday time, or else wanted to get there. The traveling public bore down.

It rained the day before Christmas, a steady, drenching downpour. That would reduce the number of customers at the counter. Eddie set himself to catch up more back work. But Shulberger came, soaked and dripping and full of dumb resentment. He dragged some damp bills-of-lading from his pocket and laid them on the counter. He stared at Eddie in a kind of respectful indignation.

"Vere iss my cars of feed?" he grumbled. "My cows, they will go hongry. Five days." He pointed at the dates on the bills.

Eddie swore sharply and Shulberger backed away. But Eddie's wrath was at the delay. He'd thought they had that licked. Nevertheless, these cars had been billed out five days before and they hadn't yet arrived. Somebody had slipped.

"You keep them," Shulberger, the dairy man, muttered. "They are no goot to me. Cows," he said; "are a essential industry, und they must be fed."

He opened the door and lumbered out. Before he could close it, Hutton slid through and slammed it impetuously. He stood there braced and dripping rainwater from his slicker, and glared at Eddie.

"Those five cars they set here for us last night. They're not ours. We found that out after we'd unloaded one of them. Now we've got to put it back. They belong to another defense plant." Hutton paused ominously.

Eddie felt his hair begin to curl. He dug out the waybills covering the five cars. They were memo bills, made in transit. The regular waybills had become separated from the cars, and likely a new clerk in some yard office along the line had made these memos from information he'd either pulled out of the air, or had incorrectly pieced together out of telegrams and telephone conversations. The bull-of-the-woods, the yardmaster, had been on his neck to get the cars moving out of his crowded yard, so that clerk had taken the shortest way to move them.

You couldn't make a competent railroader out of a man in a few weeks. It was an accumulation of experiences of all the mishaps that daily occurred, and the ways you invented to overcome them, that made you capable. Maybe the Old Soft Metal Gang wasn't so hot, but they'd not hamper operations like the amateurs.

Eddie said humbly, "Have you got the numbers of the cars that should have been set?"

"Got 'em on the phone, just now." Hutton laid a wet piece of paper on the desk. "I had to call Pittsburgh to get 'em. There they are."

"Yeah." Eddie studied the note. "All complete. And not a one of them matches the five cars now on our siding. Very, very lovely. And I guess you're in a hurry for them."

"Of course!"

"Okay. I'll look around."

"Better look good and make it brief."

"You don't believe in Santa Claus, do you?" the boomer inquired.

"In this game," Hutton stated, "there ain't no Santa Claus. But we did intend taking Christmas off to get acquainted with our families. You've fixed that," he charged. "The machinery on those cars has to be installed before the first of the year. Which means that it has to be unloaded at the plant ready for use the day after tomorrow. This war's still on. I'm not foolin'."

"I guess not," Eddie agreed glumly.

THROUGH the noon hour and on into the gray afternoon he snatched bits of information from near and far and tried to piece them together.

The city yard had overflowed onto the branch sidings. The chief dispatcher wanted to stow a string on an old stub that angled off from the branch a mile above Norwall. This stub had been abandoned during the lean years just past, and would presently be torn up. Now, the chief asked Eddie to find out from the section foreman if it was in condition to do some switching on.

Eddie sent Gabby to find the foreman; and when the latter came in through the rain, he flatly refused to let them use the stub. He'd been forty years in service and was a little arbitrary about it.

"You stay off heem," he expostulated. "She fall apart lika dat." He gestured like a windmill.

"You ought to know," Eddie agreed, and passed the word along to the chief.

At two o'clock Hutton came back with Clarence Crum, the little boss rigger. They'd lined up their equipment outside the station—low platform trucks and the A-frame and the big crane truck.

"Brother," Hutton rifled at him, "we've moved in till you find those cars. We're not foolin'."

"I know," Eddie muttered. From all he'd been able to find out, the cars might have gone back to Kalamazoo.

The two settled themselves in the office like a pair of predatory cats watching a mouse. The crew of riggers, the huskies, trooped in, found a cleared space in the warehouse and started a rousing crap game.

Eddie hung desperately to the phone, darting in a call when he could beat somebody else to it. Everybody was rushed and harassed. It was hard to get anyone to stand still long enough to listen to him.

Then Colton called back. He'd reported earlier that he had no record of the five cars. But he was himself a member of the O. S. M. G., bound by an ancient loyalty, and Eddie's entreaties had stuck in his mind and made him reflect. Now, he said those five cars had been in a train they'd shoved over to the Pacific Electric without stop in the yard. He'd dug up a consist of the train, and they were in it; but you'd need a crystal ball to locate their present whereabouts, with the general office closed for the holidays and everything jammed like it was.

Hutton and little Crum became restive and went out in search of refreshments. Gabby returned from delivering telegrams, soaked and cheerful. He listened to one of Eddie's passionate pleas on the phone, and he piped that he'd seen five cars over yonder on a siding out thar in the country.

"Looked funny, all by theirselves," he declared.

Edde stared at him reflectively. Colton's reference to the PE hit him then and his mind began to dig. He'd once worked for that outfit, a subsidiary, right here in this territory, and he began to try to trace the route those cars would have taken.

He got a picture of the line as he'd known it in those days. There'd been a transfer track over there some place where cars of citrus fruit destined for the east had been set over from the PE to the stub line. Now, the stub had been abandoned, so the transfer wouldn't be in service. But a Pacific Electric engine foreman or conductor, new to the territory and turned loose with those cars, might not know that. The PE still operated their line, and a new man not instructed might set the five cars on the transfer, being the closest point to Norwall, leave the waybills in the waybill box, and go on his way. And those cars would set there from then on, unless—

"Gabby," he asked tightly, "how long would it take you to go over there and get the numbers of those five cars?"

" 'Bout thirty, forty minutes," Gabby figured. "Want me to?"

The pipestem guy had been peddling his bicycle all over the countryside, delivering Christmas telegrams. He was bedraggled, but the hilarious glint in his eye showed he was having a swell time of it. He was working for the railroad.

"Yes," said Eddie. "Get them just as damn quick as you can."

Gabby slammed the door behind him.

"Yippee!" he yelped, and sprang onto his wheel. He went spinning away into the drifting rain.

SHULBERGER put his head in at the door. "You vill let my cows starf?" he mumbled. "Den der vill be no milk."

"Look!" Eddie snapped. "I'll get your blamed feed in here somehow. Call me first thing in the morning."

"I vill be here pefore you are up." Shulberger veered and splashed away flat-footed into the gathering dark.

Gabby came whirring through the wet gloom, the spinning wheels throwing up jets of water as he plowed through the puddles. He skidded his machine expertly

against the side of the station, and leaped clear like a rodeo buckaroo. He clattered into the office, and dug a soggy Western Union form from his pocket.

"Thar they be," he chanted.

Eddie checked the blurred car numbers. They were the five cars the defense plant was waiting for.

"Gabby," he said, "Santa Claus ought to be good to you for this."

The blurred street lights across the way bloomed dimly under their dimout shades. Gabby stirred the fire in the old stove. The crap game in the back room was becoming vociferous. The riggers had been taking on Yuletide cheer. The rain chuckled at the windows.

Quietly the years rolled back to nights of storm in lonely prairie stations, when the main weakened and went out in places, and the work trains fumbled through to patch the line. The roadmaster leaning over your shoulder, the drip from his hat down your neck, as you crouched high-strung over the key and flashed his report to the dispatcher, while out in the dusky waiting-room by the fire, the section crews and extra gang joked and jostled.

Pictures came threading out of the misty haze of those times—the glow of the desert sun; the long hotshots booming through the hot night and fading out over the flat horizon under crisp stars. The savage cry of the blizzard sweeping across the crest of the Rockies, and the grim snowplows gnawing through the high passes.

It seemed almost possible to catch those times and hold them again. You could still taste the keen tang of the younger years.

He sighed as Hutton and little Crum stamped back into the office, refreshed by Tom-and-Jerries. It was Christmas Eve again, and what a time it'd turned out to be.

"I've found your five cars for you," he said, apologetically.

Hutton leaned down at him, his eyes level as if they had caught him along the sights of a gun. Crum stood still and watchful.

"Where?" Hutton shot back intently.

"On a transfer track," Eddie murmured, "about five miles from here. Do you want to try to unload them where they stand?"

"We'll have to," Hutton snapped. "We'll start now. Let's get going."

"I guess I'd better go along."

Crum's tired voice subdued the turmoil in the freight room. The riggers trooped out, sliding into slickers, raucous and amiable. Truck motors sputtered and roared.

Eddie got into his raincoat and locked up. The three climbed into Hutton's lean, powerful car. Gabby's wet face glistened under the dome light as he caught at the closing car door.

"Aintcha gonna take me along, Eddie?" he pleaded. "I kin show right whar they be."

"Yeah. Climb in."

Hutton headed the slim car down the drenched highway. The line of muttering trucks grunted and lumbered after. Rain sparkled in the beam of the headlights against the black roadway.

"Turn right at the next corner," Gabby advised.

Hutton slowed and signalled the trucks and drove onto a narrow oiled road. The wet dark walled them in. They bumped over the crossing of the stub line and Gabby called them to halt. The trucks lined up behind. A couple of hundred yards over there to the right, five boxcars loomed up vaguely in the reflected light.

"Thar they be!" Gabby cried.

Hutton slid from under the wheel, and Crum got down limply. Eddie followed along the slippery road to the crane.

"Turn your spotlight on those cars," Crum ordered, "and let's see how we're going to get at them."

The driver pulled a switch and the hard beam of the spot stabbed the dark. It swiveled to the right and the five cars came under the glare. Hutton swore sharply. Crum stared in detached speculation.

"I was afraid of that," Eddie said gloomily.

They'd had to grade up a roadbed for

the short transfer track, and the hollow they'd gouged out to make the fill was now a big pool of rain water. The other side of the fill dropped abruptly into a plowed field. You couldn't get closer to the cars with the trucks than they were at that moment. The riggers hooted.

"A fine thing!" Hutton began the shooting. "You'll have to get the Pacific Electric to switch them over. We'd better get in touch with them right now, so we can have them set by morning."

EDDIE felt the rain oozing into his shoes. He didn't move. The PE would have to dig up a freight motor and send her down special. They'd pull the cars into town and run them through their own yard to the transfer. Then through the other yard to the branch line. And all those yards and transfers were jammed. That way, they'd not get them to Norwall within two days.

Eddie shook his head.

"Why not?" snapped Hutton.

He wouldn't take anybody's *no* for an answer. He couldn't see the difficulties of the other fellow's job.

Little Crum was watching Eddie with those flat, stone-gray eyes. Crum fitted all those huge pieces of machinery into their exact places in the jigsaw puzzle that came out a huge production plant. He did it with the sure patience of one who'd seen everything go wrong that couldn't. He knew if it wasn't possible to do it one way, you'd have to try another.

"Let's take a look," Eddie suggested.

In the glow of flashlights they splashed to the crossing and back along the rusty stub line to the transfer.

The switch stand was still in place. "It'll work," he decided as he examined the points.

"Yes," said Crum softly.

"There won't be much grade on this stub," Eddie reckoned. "One of your trucks could pull those cars without extending itself."

You could see Crum's thoughts slip into gear. They caught up quickly. His eyes slid over the length of the stub line.

"Do you think the roadbed is solid enough to take the weight?"

"Could be," Eddie nodded.

"What are you two talking about?" Hutton demanded petulantly.

"About switching the cars over to the Norwall yard with a truck," the boomer replied.

"We'd better make it the crane truck," Crum said. "In case of trouble along the way."

"Yeah?" Hutton shot. "What are you going to use as a road for the truck?"

"You can keep one set of wheels on the ties between the rails," Eddie pointed out. "The roadbed's got some ballast, and it's been oiled down a few times. It ought to hold—with luck."

"Yippee!" Gabby shrilled. "I'll be brakeman."

"Brother," Hutton warned, "a couple of those cars have fifty tons of machinery in them, and you told us yourself the section foreman wouldn't let an engine in this stub. In this business of moving heavy equipment you can't play your luck."

"A locomotive's got more weight than loaded cars," said the relief agent.

Crum put his flat stare on the maintenance man. He had taken an oil refinery far into the jungle, a piece at a time, and set it up. He'd seen months of work wrecked in an instant.

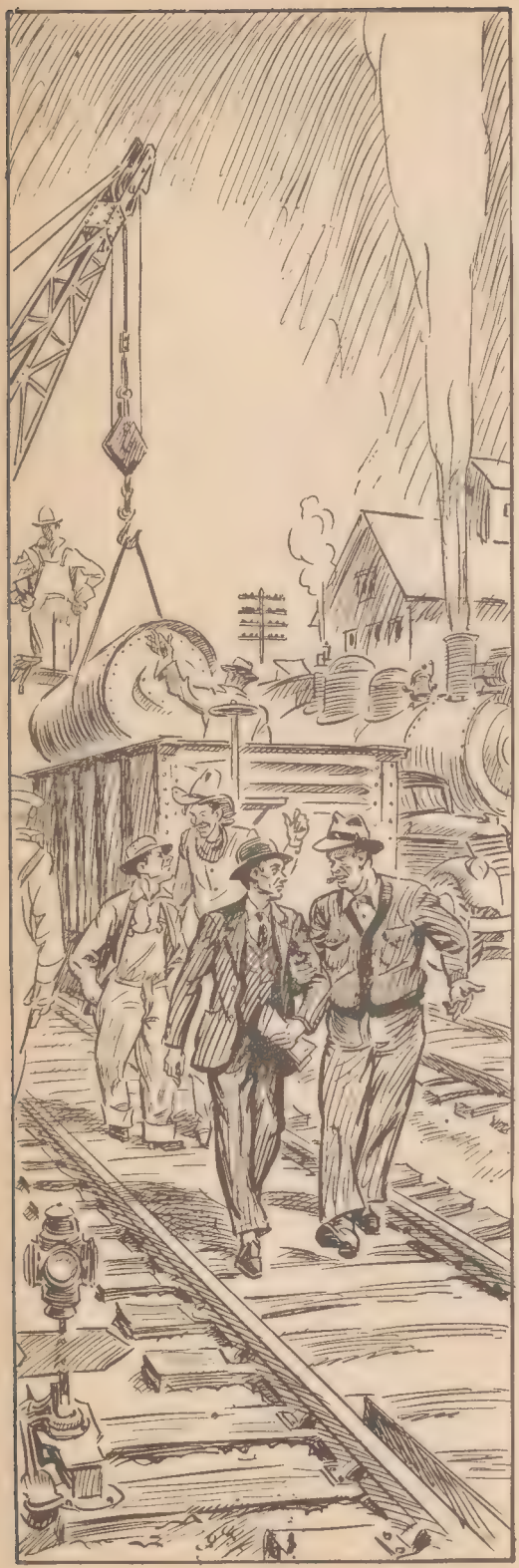
"You've got to play your luck when there's nothing else left," he said wearily. "The stuff is no good to anybody where it now sits." He turned to his riggers. "Back the crane onto the crossing and head her up the stub," he ordered. "Then run out the cable and tie it onto the drawhead of the head car."

The riggers moved without confusion.

"I'm the brakeman," Gabby chattered.

He looked at Eddie for permission. Eddie nodded. You couldn't have tied Gabby down then with a hundred-foot rope. He went up the side of the head car like a squirrel.

The big crane moved out of the line and maneuvered onto the crossing. The cable rattled from the winch as two riggers



pulled it to the drawhead of the first car and tied on. The winch grunted and the line tightened.

Eddie opened the switch. "Let off the hand brakes," he called to Gabby.

Drawbars grumbled and the line of cars clucked over the rusty switch points and lined up on the stub. The winch stopped. Crum ordered the rest of the equipment and Hutton's car back to Norwall.

"And you fellows be sober enough to go to work when we get there," he instructed. He nodded to the driver of the crane. "Take it away," he said, and hooked himself onto the side of the cab.

Four riggers scrambled onto the flat bed under the girder-like jib, and Eddie and Hutton swung up among them.

"I still say you're a pair of blamed fools," Hutton snapped.

THE SPOTLIGHT probed ahead. Rain drifted through the wedge of light. The rails glinted dully under the white beam. This was the dimout area on the West Coast, and only the faint glow of shaded street lights of surrounding communities made faint patches in the solid darkness.

The truck moved along the track, the centipede wheels at that slow speed taking the bumps of the ties and the chuckholes of the roadbed with an easy sway.

Gabby was crouched by the brake wheel of the head car, alert as a terrier. "Like shootin' fish in a rain barrel," he whooped.

"At this rate," Hutton exulted in sudden optimism, "we'll soon be in the Norwall yard."

Eddie winced. That would sure break their run of good fortune. Go to bragging, to adding up how it was all going to turn out hunky-dory, and lady luck would slap you down and kick you in the pants. You had to sing soft, or else treat the old gal rough to make her behave. Eddie knew it—in his bones he knew it—that Hutton's boast was fatal. He was braced when calamity struck.

From over toward Norwall, a raucous cry drifted in through the wet dark. Another lifted and squawled from behind. A

banshee screech came from under the bulge of the Puente Hills. They were the frantic signals for a complete blackout.

The distant faint daubs of light in the curtain of darkness winked out. The driver switched off all his lights and stopped the truck with a jolt. The world was suddenly as dark as the inside of your pocket.

Unidentified planes were adrift up there in the murky sky, or else some ominous object had appeared in the Pacific Ocean off-shore. You could feel the war come close.

It took time to adjust your mind to the warning of the sirens and the total darkness. In those quick seconds, disaster reached for them. The roadbed gave way under the multiple rear wheels of the truck, and it sank slowly in a breathless drag. The men hung on and caught their breath tight as it tilted and the radiator nosed up toward the low clouds. It was no more than a short slump, but in the utter darkness they felt as if they were falling into the center of the earth. They were dazed when the truck stopped sagging.

Eddie dangled by one hand from the jib. Hutton was swearing in short bursts beside him; and in the confused quiet Eddie could hear the string of cars still mumbling along the rusty rails behind them. They loomed up, rolling free and unchecked. Gabby hadn't yet recovered from the shock of the blackout, and he wasn't aware of the sunken track and the stalled equipment just ahead.

The spotlight flickered on and blazed a swath as it turned and caught the cars in a white glare. Little Crum came down the canted truck bed, hand over hand on the slack cable. His flat eyes studied the situation as calmly as he'd have scrutinized a road map.

The picture was spotted out starkly. There had been a wooden culvert here. In the years of neglect it had rotted away and flood waters had cut the earth from around it till the roadbed above had little support. When the heavy truck had come to a quick stop, with its rear wheels on the weakened spot, a section of the roadbed had given way in a long sag under the track.

The beam of the spotlight hit Gabby like a jet of water. He was crouched under his huge sombrero, bewildered by the throng of events that had trooped in on him all at once. The cars ambled placidly up to the other end of the dip in the track.

Eddie took a sharp breath. "Anchor 'em, Gabby!" he cried.

The flimsy figure disentangled itself like uncoiling springs. Thin, bowed legs spraddled and braced. The long arms came out and hooked onto the brake wheel. Gabby looked like a preoccupied spider galvanized by Eddie's command. Tentacles sprouted in all directions from the sombrero. He gave a strangled yell. Then the ratchet whined under the pleasure of his toe as he spun the brake wheel.

The head car grunted and flinched with the grab of brake-shoes. It leaned over gently at one corner as a rail sank under it. If it tipped over the edge of the sway-back, most of that string would pile up down here at the bottom, with the crane underneath.

"Hold 'em, Gabby!" Eddie shouted.

That spidery man was made of stringy rawhide. Gabby's frantic swing got him two more notches on the ratchet. The car bowed demurely, and hesitated. Gabby clung and peered down into the dark waters of a ditch, far below. In the next delayed-action split-second, you couldn't be sure whether or not the cars were going to take the swoop into the depression. Then they subsided quietly.

"And a very good brakeman he turned out to be," Eddie decided with relief.

"All right, wise guys!" Hutton stormed. "Now where are we at?"

Crum said: "First thing, we'd better all get off this truck. But take it easy. She seems to be hanging by a hair."

They unloaded carefully. Gabby came over the edge of the boxcar and eased down the side. Crum examined the rubble under the sagging track. He climbed to the head end of the truck, moving like a drifting shadow. He turned the spotlight along the track ahead till it came to a

telegraph pole. Crum pointed to it and turned to his crew.

"Take the line out and hitch onto that," he ordered.

RIGGERS swarmed. Across the sag they cast the cable loose, and two at the truck splashed away with it, and hooked it to the telegraph pole.

Crum nodded to the driver. The winch turned and the line tightened. The pole leaned slightly, then held as the pull increased.

"Take it away," Crum directed, and the driver fed power into the winch.

The truck heaved and swayed under the hard drag of the line. It plunged once, and then pulled itself onto the solid roadbed.

Crum didn't hesitate. "Let's have that line." He turned to Eddie. "Any idea where we can get enough ties to shore up the track?" he inquired wearily.

"I know," Gabby piped. "Thar's a big pile of old'ns down by the next road crossing. 'Bout a quarter of a mile."

"Let's get a load," Crum said.

The truck moved off down the track, the headlights thrusting ahead.

"You're not observing the blackout to any extent," Hutton remarked.

"It's an emergency," Crum answered undisturbed.

"Yeah, but they can put you in jail for it," Hutton explained.

A crossing sign pulled in out of the dark, and the spotlight went on and picked out the pile of ties. The riggers swarmed out with the line. They caught bundles of them in the loop of the cable, and the crane swung them aboard the flat bed.

That driver could handle equipment. He showed it, backing the huge vehicle down the narrow strip of roadbed.

Crum could make construction fit with what he had. Back at the cave-in, he dropped the ties in convenient places, then tied the crane onto the swayback in the rails and hoisted it in the air. Under his quiet direction the riggers, working in mud to their knees, cribbed up a solid foundation for the track. Crum had a quick, experienced eye for stresses and strains, and his men were well trained. It wasn't long before he had the rails and ties bedded again. They weren't level, and they didn't look any too secure. But Crum said they'd likely hold.

That tilted boxcar at the other end of the sag was something else again. Crum couldn't get his crane close enough for a straight life. The roadbed had crumbled somewhat for a rail-length; it would have to be strengthened, but, as Hutton pointed out impatiently, you couldn't do that with the car on the rail. And if you got to tinkering with it, the car would sure tilt further and slide into the ditch.

"Which would be just dandy," Hutton snorted. "When it happens, you and me'd better walk off the job and keep on going —fast. Because they'd sure shoot us for saboteurs, if they caught us."

"And they would be quite justified," Crum said agreeably.

He was working fast. He dug out more line and a block-and-tackle and sent his men across the new fill to rig the tackle to a telegraph pole beyond the rear car. They hooked onto the string of five cars, and backed them off a couple of rail-lengths with the winch. Crum had his riggers shoring up the weak spot in the track as soon as the string was clear.

"Okay," he nodded when he judged his whole new construction job was solid enough.

They hooked the line onto the head car again, and the winch began to wind it in. The cars crept slowly. The cribbing groaned as it took the weight. Mud and water spurted up around the sunken ties. Those sounds of distress made your stomach go into a flat spin. The cars swayed and dipped. Hutton held his breath so hard he'd nearly strangled himself by the time the string cleared the fill.

"The Lord was good to you that time," he choked as the truck began to move forward and everybody scrambled to their places.

Gabby shrilled his war cry and scurried up the side of the head boxcar. The truck took up its slow pace. The dim glow of street lights blossomed faintly again out over the valley. The blackout was over.

"SEE Ferguson and give him this, Gabby. He'll put you on"

Switch lights at the junction of the branch moved in slowly, then blurred as the dawn light struggled through the clouds.

More rolling stock loomed up ahead—three boxcars parked on the stub just off the branch.

"How do you get around them?" Hutton grumbled.

Eddie's sleepy brain stirred. He went forward and checked the car numbers. They were familiar. They should have been. He'd repeated them often enough yesterday while trying to get a trace of them. They were the cars of feed for Shulberger's hungry cows.

"We'd better switch them out onto the branch," Eddie decided, "and take them along."

"There'll be a switching charge on that," Crum declared, humor glinting in his cold eyes.

He snaked the three cars out onto the branch, and backed the others down on top of them and tied on. They left a rigger to protect their rear, and sent another ahead to flag them into town.

Ghostly daylight had filtered through the rain by the time they dragged the cars into the siding at Norwall. The riggers got down from the truck.

"You fellows," Hutton jeered at them, "look like a flock of mud pies."

"We'll get some dry clothes," said little Crum in his tired voice, "and a shot of breakfast. Then we'll start unloading."

"It's been nice knowing all you fellows," Eddie said sleepily. "I wish you a very merry Christmas."

"Merry hell!" Hutton swore.

"Any time you want some more stray cars found," Eddie added politely, "just ring me up."

Gabby came teetering through the rain on his high-heeled boots, yipping cheer-

fully. Shulberger loomed up across the yard, his big feet slapping the puddles as he hurried toward them.

IN THE LULL after Christmas, Eddie began to pull things together for the end of the month. He was hitting his stride at last. The work had begun to groove. He could run off the reports rapidly now, and lay his hand on any item he wanted.

He spent New Year's day in the locked station, making monthly reports. Toward evening he got a balance. He drew a contented breath then, and surveyed the dingy office. At that, it hadn't been too tough, coming back. The job had nearly tossed him at first. But it was really surprising how much he'd accomplished even then, doing things automatically.

Heavy footfalls rumbled on the platform. Old Shulberger peered in at the window. Eddie groaned and unlocked the door. Shulberger lumbered in.

"I yust vanted you a brosberous New Year," he said diffidently. "This year ve vill get der cars in quicker und unloated faster. Ve vill do dis for our country."

"And for the cows," the boomer chimed. "It's a deal!"

As the big dairyman left, Gabby yipped outside and flung his bicycle against the wall and clattered in.

"Eddie," he pleaded, "do you reckon I could ever get to be a brakeman?"

The relief agent began a disparaging smile, then checked it. After all, why not? Those bowed legs made him appear deformed, but that was deceptive. Gabby could get about as nimbly as any, and right now he could do a good job switching. He was certainly tireless.

"Let's give it some thought," Eddie suggested.

Somebody knocked decisively on the locked door. Eddie opened it—and felt a cold trickle run down his back. It was the kind of feeling you might get if you met a ghost. The man standing there impatiently might have been old Buck Barabe himself, except that his hair and pig-bristle mustache were nearly white, and the bulky shoulders were a little hollow and bent. Other than that—no change.

"So," the man said in a familiar buzz-saw tone, "you've been doing just as damn little as you possibly could, since I saw you last." He came inside with an obstinate stride that had the sound of war drums in it. When Buck Barabe crossed any space, it seemed like conquered territory thereafter.

The man thrust out a hand. It *was* old Buck Barabe!

Eddie said faintly, "Yeah, I been right busy here." Then he grinned. "But I see you're still sticking around in about the same old place. Been practically nowhere at all. You sure miss a lot, Mr. Barabe."

"Still the same old boomer," the Old Man growled. "Never got any place."

"Oh, I've been around. But what are *you* doing over at this end of the line?" Eddie inquired politely. "Last time, you were Superintendent away over there—"

"Employes," Barabe barked, "should know who their officials are. I'm your General Manager."

"This is Gabby McCue," Eddie cut in quickly. "He's my assistant, and a blamed good one."

Gabby opened his mouth. He was making a desperate effort to ask this high official for the job he'd wanted more than anything else all his life. But the words stuck in his throat.

"Let's see," Barabe reflected, "didn't I hear something about you and Gabby switching some defense plant cars off the stub with a truck?"

The Old Man never missed much. He likely had a better secret service than the Gestapo.

"Yeah," Eddie nodded. "Gabby was the brakeman on that trip. And, by the way, he wants to get on regular, braking."

"Well, why not?" Barabe grunted. "We need them." He took a card from his wallet, made a quick endorsement on the back, and handed it to Gabby. "See Ferguson, and give him that, Gabby. He'll put you on."

Gabby said, "Yes, *sir!*" and stumbled out. He vaulted onto his wheel. "Yippee!" he shrieked.

BARABE relaxed then and sat down and took out a pair of black, oily cigars. He handed one to Eddie. Dusk and silence gathered in the old station with its smells of ancient dust and musty records.

Barabe sighed. "I hear they immediately elected you to the Old Soft Metal Gang. Silver in the hair, gold in the teeth and lead in the pants," he enumerated. "Well, at that, there wasn't so much lead. You can write it down that the veterans saved our neck. We'd have been sunk without them."

He shook his head, blew a cloud of smoke and went on: "It makes a fellow proud of those old rails, hanging on till they'd got the swing of it again, and then going on from there. Proud to be one of them."

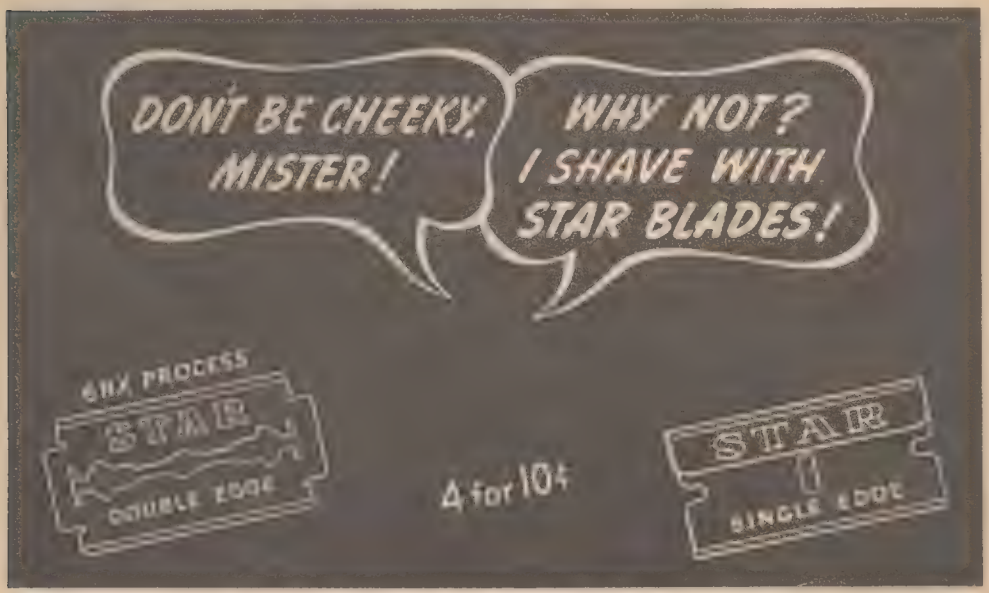
Barabe stood up.

"I stopped by," he said crisply, "to wish you a successful New Year and to express my appreciation. The regular man will be back within a few days," he promised, "and then you can have that OS job you asked for." He lanced Eddie with his grim old eyes. "Go ahead and be a no-good boomer, if you like it," he growled, "but all the drifting you're going to do now will be right here on this division."

Eddie watched the Old Man's car roll away down the darkening highway. He forgot he was tired. He'd come out of the hills and rolled back the years and done a job. In those bright younger times he'd learned his trade, and the essentials were woven into his being. He was still a railroader—and a glimmering thought danced in the back of his mind to warn him that he would be one to the end of his days.

His thoughts sharpened. The old restless urge to be on the careless road again began to stir. His mind ran ahead to those little desert telegraph stations, each a tiny cluster of section houses and operators' quarters scattered carelessly on the flat solitude, with the order boards flung out rigidly from the top of a tall, slim pole that pointed sharply at the exact center of the sky. Sun and stars and the deep silence shattered by the heavy trains storming by as they kept the men and material rolling to the battle fronts of the world twenty-four hours a day.

Eddie Sand chuckled. Walley, down there in the hills, would hoot at such blatant conceit. He'd write old Walley a letter that would curl his ears.



WINTERSCAPE: Norfolk & Western red caboose will soon disappear around the bend near Christiansburg, Va.

WARTIME FREIGHT rolls into and out of the snow-carpeted N&W classification yards at Roanoke, Va.

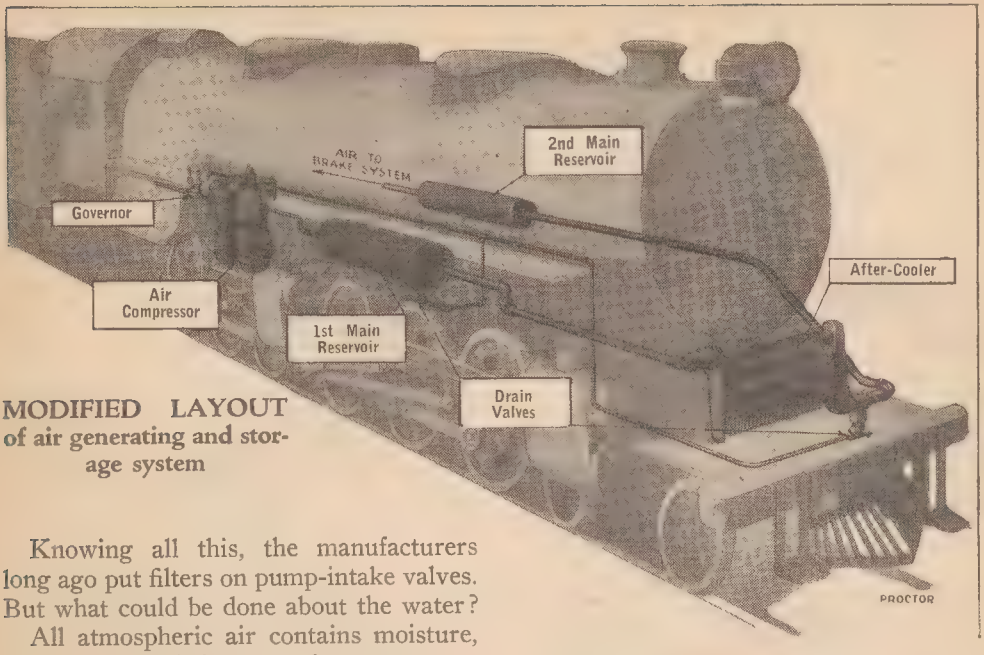
NO MORE do brakemen ride the tops with stout oak clubs to set the binders on long down grades. Retainer valve to the right of the brake wheel on the car pictured below maintains a predetermined shoe pressure against the wheels, when turned up at the summit of the hill

Light of the Lantern

After-Coolers and Retainers

IT ISN'T MUCH COMFORT to the brakie with a window frame around his neck to learn that the kicker that tossed him out of the cupola was caused by a thin shell of ice in a triple valve. Yet it's little things like that which have kept the airbrake manufacturers busy, year in, year out, improving and perfecting one of the most efficient mechanisms devised by man.

As most of our readers know, the triple valve is the "dispatcher" of the airbrake system. It serves the three-fold purpose of automatically directing air into the car reservoir, to the brake cylinder, and to the atmosphere, depending upon the pressure in the train line. Its nicely arranged valves work well just so long as the air fed through them is dry and clean. But let moisture gather and freeze, or grit condense within the device and it will act sluggishly at first, and then, of a sudden, go into emergency. Immediately the whole braking system becomes unbalanced, other triples follow suit and the train is ripped apart.



MODIFIED LAYOUT of air generating and storage system

Knowing all this, the manufacturers long ago put filters on pump-intake valves. But what could be done about the water?

All atmospheric air contains moisture, and the hotter it becomes the more water it is capable of holding. Cool this hot air and condensation takes place. In the case of the airbrake system, the air is heated through compression in the pump; then sent on to the main reservoir. Provided cooling and precipitation occurred entirely within this cylinder, the petcock at its bottom could be opened before the engine was dispatched for service (as required by Federal law) and the remainder of the system would give no trouble. But under ordinary operating conditions the air is passed on to the train line faster than such condensation takes place.

For this reason it has been customary practice, for many years, to place a series of radiating pipes between the compressor and the first main reservoir. Extending in the form of a coil along the side of the boiler under the running board, they work well as long as the radiating passage can be made extensive enough in relation to the compressor output. Moisture, accumulating within the passage, drains down into the reservoir.

But trains continue to grow in length. Cross-compound pumps with a capacity of 120 cubic feet a minute long ago proved inadequate and were brought up to 150-foot capacity and used in batteries of two. They kept the pressure up all right, but finding enough piping space on the side of a locomotive became more than an incidental problem. Some new method was in order and it took the form of the *after-cooler.*

THIS DEVICE, extending between the second main reservoirs, is nothing more than a coil of copper pipes with fins which make for increased radiation by keeping the metal at atmospheric temperature. It is generally placed on the front end of the engine below the smoke arch and behind the breast beam. Protected from the elements by shields, it nevertheless gets sufficient air for perfect operation when the train is in motion.

Working in conjunction with the condensation coils is another mechanism, called an automatic drain valve. One of these is placed at the base of the first main reservoir and another at the outlet of the cooler. Each consists of casing in which is set a diaphragm, a double-seated valve and two springs. In normal position the valve is held to its lower seat by the pressure of the springs. But when the air

pump governor shuts off the pump, excess air flows into a chamber beneath the diaphragm, deflecting this member upward and moving the valve to its top seat. As the latter advances from one position to the other, any water which has accumulated above it is quickly forced past the seat and into the drain port. To one standing in front of the engine the whole operation sounds like a man giving a loud sneeze.

Then, as main reservoir pressure drops and the pump goes on, air under the diaphragm is vented and the springs return the valve to its lower position, permitting a second escape of water to the drain pipe. In this manner practically no moisture gets past the second main reservoir and the danger of frozen triples is eliminated.

ANOTHER problem that confronted airbrake men very early in the game was that of conserving compressed air on down grades. We have just pointed out the need for constantly larger pumps to feed long train lines. Even with leaks kept to a minimum (the Bureau of Locomotive Inspection demands that loss in the brake pipes shall not exceed 5 pounds per minute, or three pounds in the main reservoir and related piping), it is still no mean task for a compressor or compressors to insure an adequate supply on the big hills.

To meet the situation, the retainer valve was devised. Appropriately named, its duty is to hold a predetermined, limited amount of air pressure in the brake cylinders while a train is dropping downgrade. This not only keeps the train under control with a marked saving of air, but permits recharging of the auxiliary reservoirs without completely releasing the brakes.

Pipe-connected to the release port of the triple valve and located at the end of the car, within reach of the brake wheel, this retarder can be operated to prevent air in the brake cylinder from escaping to the atmosphere.

As shown in our diagram, the principle parts are a small weight with a valve at the bottom, set within a casting. Air from the triple enters a cavity beneath the valve. When the handle is down, or in normal position, ports in the plug-valve allow the exhaust to flow through the pipe and to the atmosphere, just as it would if there was no retainer at all. But when

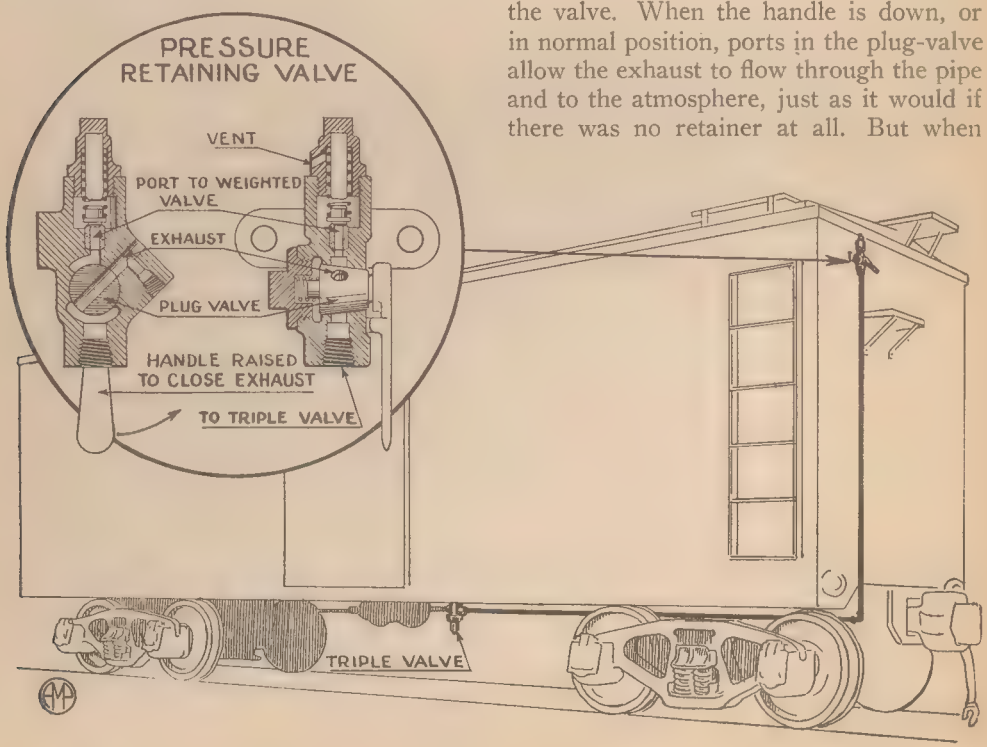


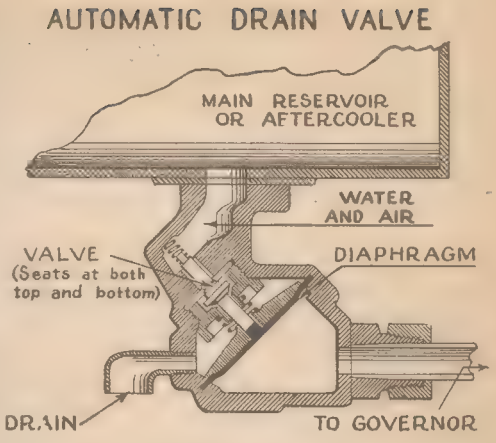
Photo by R. P. Morris, 247 Gerston Ave., Brooklyn, N. Y.

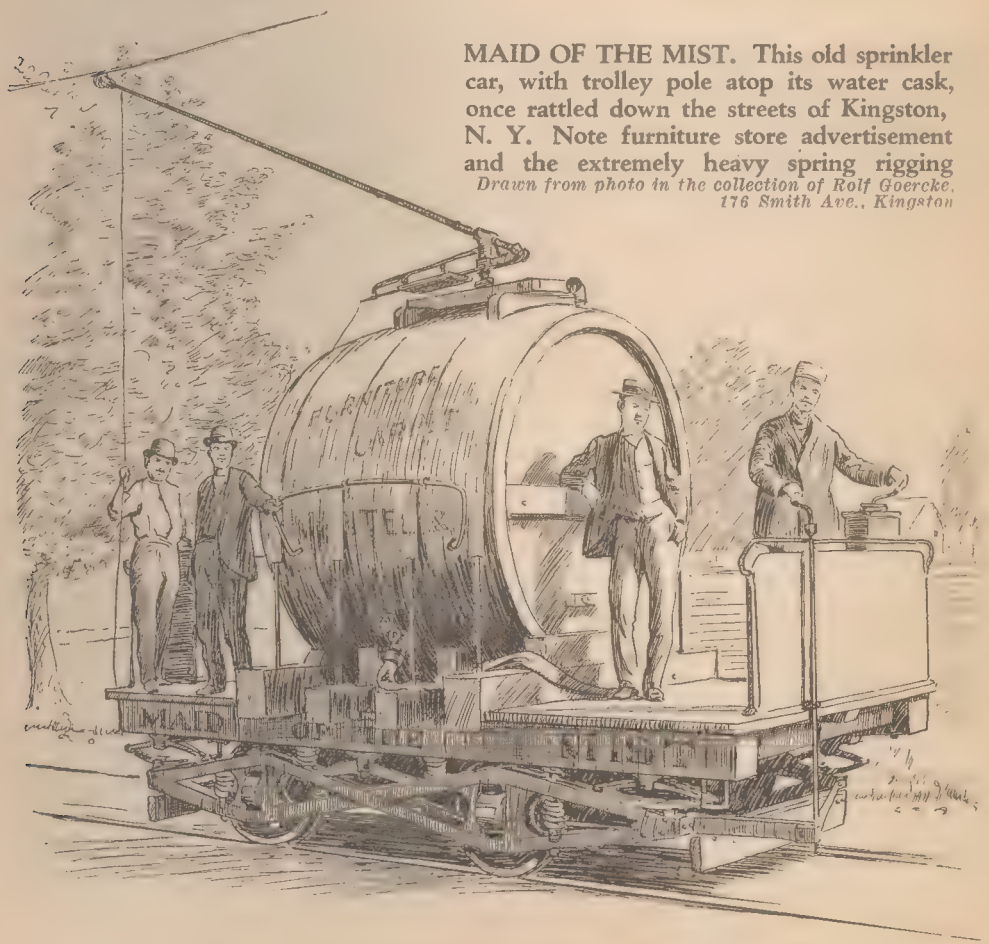
CONDENSATION in the train-line wasn't much of a problem when Richmond built the Chesapeake Western's number 102 in 1895. Piping ran directly between the single pump and main reservoir

the handle is lifted, the weight is arranged in such a manner that it takes 15 pound's pressure to raise it from its seat. In other words, that amount of air is trapped in the cylinders, to keep the brakes on the car partially applied.

Heavy coal and ore equipment, however, needs still greater pressure, and here a three-position retainer is used. By installing two weights, the second in the form of an inverted cup which can be lifted independently and eliminated from the valve loading, this arrangement gives twenty-five, or fifty-pound adjustments (the former, when the handle is fully raised or horizontal, and the latter when set at forty-five degrees).

"Turned up" by the brakemen when the train arcs over the crest of a long grade, these small retainers do the hickory clubbing, nowadays, with precise mechanical efficiency.





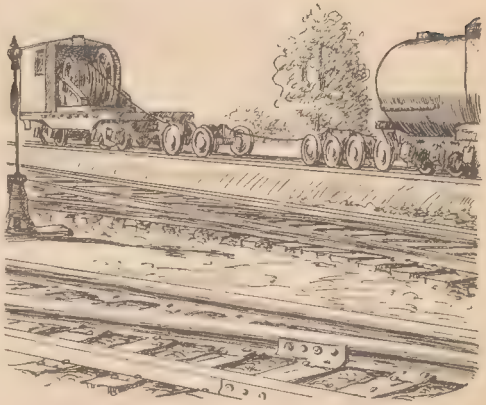
MAID OF THE MIST. This old sprinkler car, with trolley pole atop its water cask, once rattled down the streets of Kingston, N. Y. Note furniture store advertisement and the extremely heavy spring rigging

Drawn from photo in the collection of Rolf Goercke, 176 Smith Ave., Kingston

Lidgerwood Track

By "SPARKY"

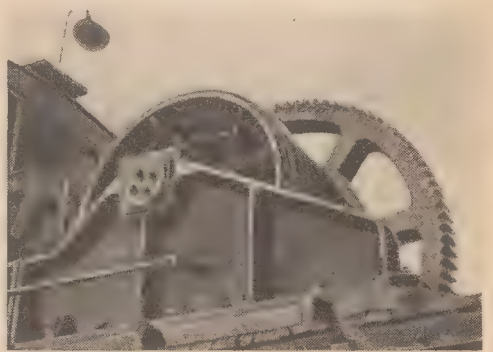
INTERSTATE COMMERCE COMMISSION ruling that wheels whose flanges take the 15/16 inch gage must be removed from service and brought back to standard, hit Southern Pacific's steep and winding Sacramento Division hard until shopmen worked out the Lidgerwood method of re-turning wheels without dropping them. This system makes use of an eight-hundred foot track on which the locomotive is hauled back and forth while cutting tools bite into the tires, restoring them to correct contour



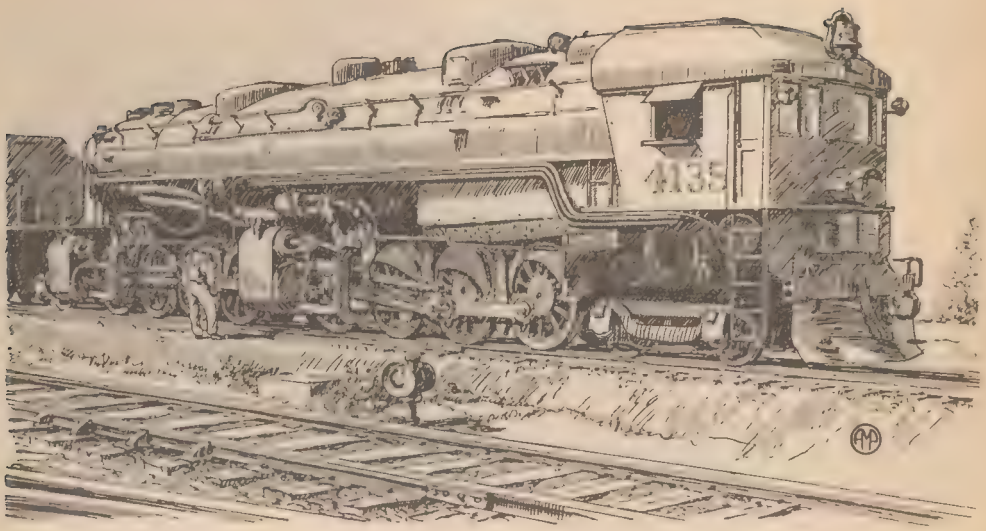
1. Old method of dropping and re-turning wheels took a lot of time—about three weeks for an Articulated Consolidation

3. Winch car pulls engine back while cut is being made. A discarded tender booster returns engine to starting place

2. Cutting heads are attached to brake beams in place of regular brake shoes, which have been removed



4. Close-up of the powerful steam winch. Other end of the 1¼-inch cable is attached to rear tender coupler



5. Several dollies are used to keep cable out of the dirt and steel shavings which would shorten its life

6. Chips left by the cutting tools build up rapidly on Lidgerwood track. A crane with magnetic lift removes them

7. Gages used to check driving wheel flanges. Lidgerwood puts locomotives back on road in twenty-four hours

The Information Booth

EACH month the Lantern Department includes, in addition to a technical article on some ramification of railroading, answers to rail questions of general interest, submitted by our readers. We do not send replies by mail.

1

I HAVE an old photo of a Boston & Albany engine which shows no steam dome on the boiler. Is it located inside the cab?

No. Many early engines, including a number built for the B&M, made use of a perforated dry pipe in place of the customary steam dome. Vapor passing into it was valved directly to the steam chests.

2

WHAT is meant by a 6-0-6 type?

Diesel-electric passenger locomotives having two six-wheeled power trucks are sometimes called 6-Q-6s. More common is the C+C designation, indicating three axles plus three axles. Under this system, a conventional Diesel switcher would be a B+B type.

3

WHAT three states have the greatest number of common carrier railroads?

Pennsylvania, Illinois and Texas.

4

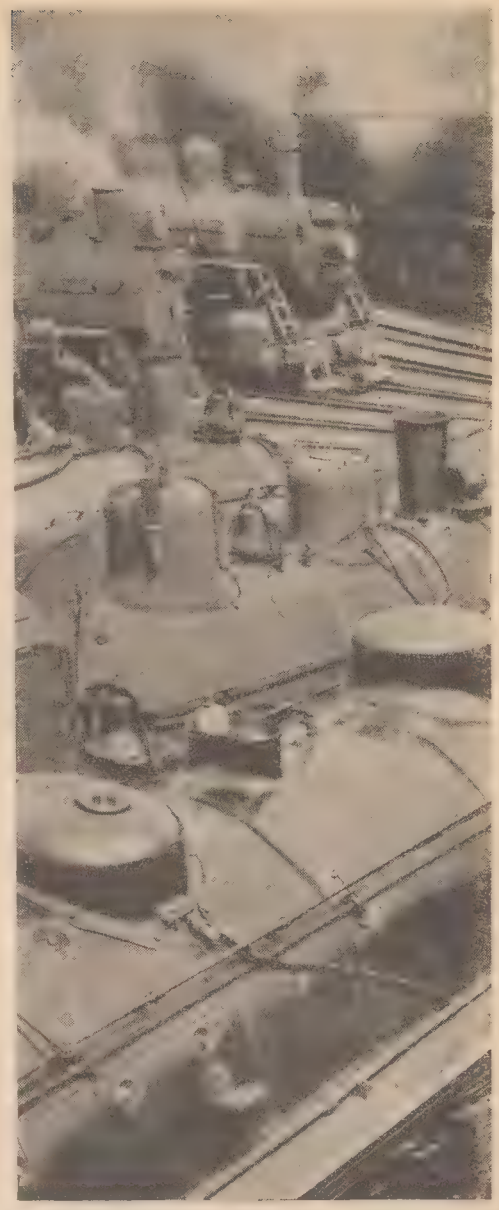
WHEN were solid vestibule trains first operated between Chicago and Denver?

We cannot state positively. Records show that at least one road—the Burlington—was running them in 1888. Time for the trip then, was 43 hours.

5

SOME TIME ago you ran an interesting article comparing steam and Diesel-electric power. You did not, however, use figures to show the number of miles run in a given period of time, by the average engine of each type. Are they available?

Only in broad estimates. The average steam road engine, today, turns in between 7500 and 12,000 miles a month, while a Diesel may deliver from 21,612 to 32,087 miles. Bear in mind, however, that most



STEAM UP and waiting for the table. May 1943

Canadian National Engines at Turcot, Montreal, engine house. Number 6205 (see *Locomotive of the Month*) is on the bridge

of the Diesels are handling high-speed trains with schedules calling for few stops. Electric passenger locomotives, which possess the same traction drive as the Diesel, but are generally used on runs of restricted length, show no such impressive discrepancy, averaging from 15,000 to 17,000 miles per month.

6

WHEN did the New York Central start using Pacific type engines, and what were their specifications?

Five locomotives of this wheel arrangement, designated class "K", were built by Schenectady in November, 1903. They

had 22x26-inch cylinders, 75-inch drivers, 200-pound's boiler pressure, weighed 218,000 without tender and developed 28,500 pounds' tractive effort. Originally numbered 2795 through 2799, they subsequently became the New York Central's 3595 through 3599 (Class K-9).

One month later four more Pacifics were outshopped for the road at Schenectady. Known as the K-1 Class (2700 through 2703), their cylinders were one inch smaller in diameter than those of the K class, and their weight 11,000 pounds less. They were assigned to the Boston & Albany and later bore numbers 3500 through 3503 (class K-1a).

During the next eight years a number of other 4-6-2s of nearly the same design were built for other "Central" lines—the Michigan Central, Big Four and Boston & Albany—but the main line and Lake Shore & Michigan Southern adopted the more impressive K-2 and K-3 Classes as standard. It might be added that the original Class K was closely followed by other roads, among them the Erie.

7

I HAVE been told that the Pennsylvania Railroad was among the first lines in the country to use iron bridges extensively. When were its wooden structures replaced?

All but four wooden bridges on the PRR between Philadelphia and Altoona were torn down and iron trusses substituted in the years 1852 through 1876. On

New Crew Cars for the "Central"

TO RELEASE all possible equipment for passenger service, NYC's East Buffalo shops have just completed twenty crew cars for use with express and milk trains which previously carried coaches for trainmen

THE NEW CARS are equipped with high-speed passenger trucks and steam heat, but carry an auxiliary coal stove for use with mixed trains. Furnishings include a conductor's desk, four walkover seats, lockers, lavatory, mantle type lamp, fire extinguisher, stretcher and toolbox

Photo by C. A. Schrade, Springdale, Conn.

CABOOSES come and cabooses go but Reading bobbers remain our choice for colorful personality. Note back-up hose

the Altoona-Pittsburgh section the original spans were of iron. Collectively this "great middle route" incorporated one hundred and seventy-three iron spans.

8

HOW many railway gages are used in Australasia?

Three, to the best of our knowledge. These are the 4 ft. 8½ in. spread of the New South Wales government Railways and the Commonwealth Railways (Trans-Australian); the 3 ft. 6 in. gage of the Queensland Government, Tasmanian Government, Emu Bay Railway (Tasmania), Mount Lyell Mining Railway, South Australian Government, West Australian Government, and New Zealand Government; and the 5 ft. 3 in. gage of the South Australian Government and the Victorian Government.

9

FURNISH specifications of the Great Northern's 1-D-1-1-D-1 class electric locomotives.

These locomotives, used in freight service on the road's Cascade Mountain crossing between Wenatchee and Skykomish, Wash., are dual unit machines, as their wheel designation indicates. Together, the units have a length of 94 ft. 4 in., weigh 274.8 tons, and develop 137,400 pounds maximum starting tractive effort. Driving wheels are 56 inches in diameter, top speed 37.5 miles per hour.

10

WHAT are the maximum and minimum rail clearances for locomotive pilots?

Six and three inches, respectively, on reasonably level track.

CENTRAL OF GEORGIA

IMPORTANT link in Chicago—Florida rail service is the Central of Georgia, whose lines blanket the states of Georgia and Alabama. The longest rail system under one management at the time of its completion exactly a century ago, the C of G today operates all of its named trains in conjunction with still larger systems to the north, west, and south. Four of these flyers: *The Southland, Dixie Flyer, Dixie Limited,* and *Flamingo,* travel its trackage between Atlanta and Albany, Ga., while another two, the *Seminole* and *City of Miami,* use Birmingham—Albany rails.

To better handle the heavy consists of *The Southland, Dixie Flyer* and *Seminole,* the road has just purchased eight 4-8-4s from the Lima Locomotive Works. Bearing a price tage of $178,000, each unit is capable

Locomotive of the Month:

Central of Georgia 4-8-4

Specifications

Cylinders	27x30
Drivers	73½
Pressure	250
Weight on Drivers	260,000
Weight, Engine	447,200
Grate Area	90.4
Tractive Force	63,200
Tender Capacity:	
Water	13,000
Coal	21

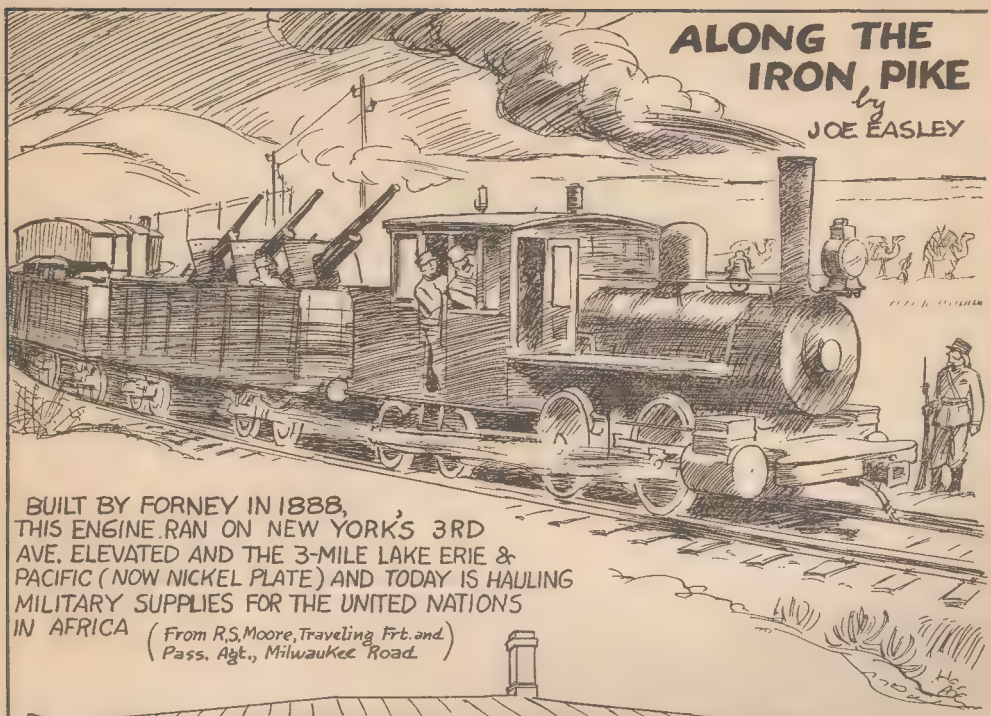
of maintaining existing fast schedules between Macon and Atlanta with 22 passenger cars northbound, or 30 cars southbound. In addition, the 450s will be used for manifest freight service.

Checking specifications, we find that these engines exert 12,800 pounds more starting tractive effort than their C of G predecessors of the Mountain type. They bear a close resemblance to the Southern Pacific's GS-1 and GS-2 Classes, and incorporate the most modern developments in the field of steam motive-power design. These include air after-dryers, low-water alarms, speedometers, and compressed-air whistles. An exceptionally large smokebox door insures easy access to the front-end interior. Valve motion is of the Walschaerts type.

Tenders are comparatively small for this type of power.

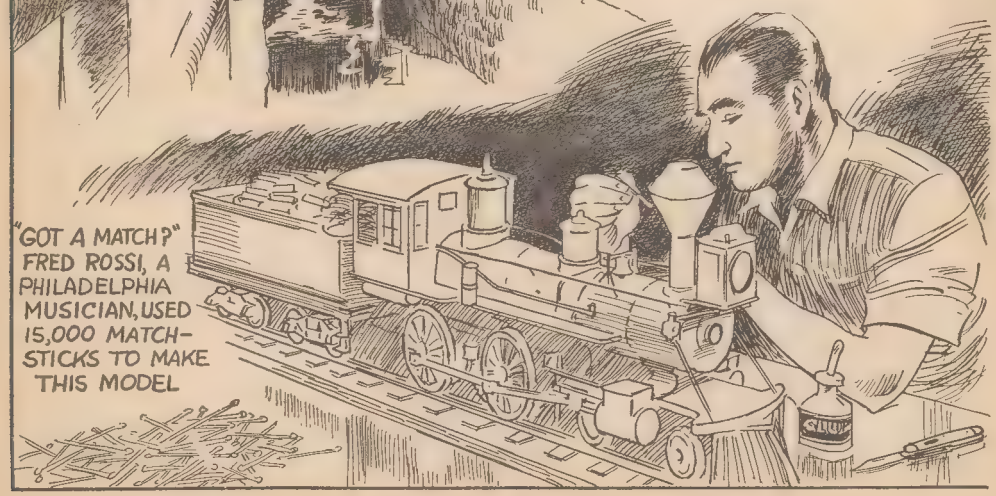
ALONG THE IRON PIKE

by JOE EASLEY

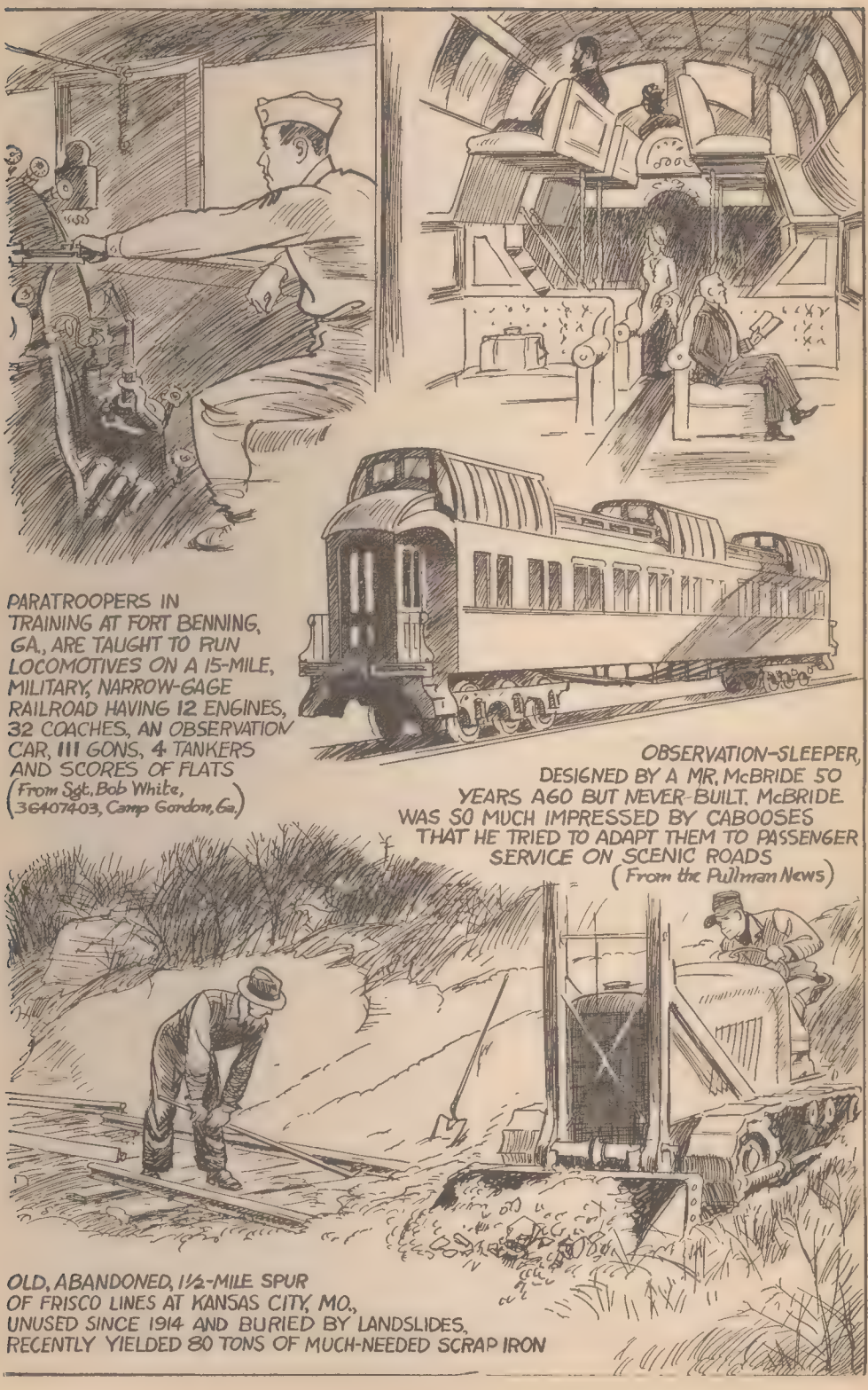


BUILT BY FORNEY IN 1888, THIS ENGINE RAN ON NEW YORK'S 3RD AVE. ELEVATED AND THE 3-MILE LAKE ERIE & PACIFIC (NOW NICKEL PLATE) AND TODAY IS HAULING MILITARY SUPPLIES FOR THE UNITED NATIONS IN AFRICA (From R.S. Moore, Traveling Frt. and Pass. Agt., Milwaukee Road)

IS THIS THE ONLY RAILROAD PASSENGER STATION BUILT OVER A BROOK? IT'S LOCATED ON AN ERIE BRANCH AT WEST ORANGE, N.J. (From Wrege-Mankoff, Newark and W. Orange, N.J.)



"GOT A MATCH?" FRED ROSSI, A PHILADELPHIA MUSICIAN, USED 15,000 MATCH-STICKS TO MAKE THIS MODEL



PARATROOPERS IN TRAINING AT FORT BENNING, GA., ARE TAUGHT TO RUN LOCOMOTIVES ON A 15-MILE, MILITARY, NARROW-GAGE RAILROAD HAVING 12 ENGINES, 32 COACHES, AN OBSERVATION CAR, 111 GONS, 4 TANKERS AND SCORES OF FLATS
(From Sgt. Bob White, 36407403, Camp Gordon, Ga.)

OBSERVATION-SLEEPER, DESIGNED BY A MR. McBRIDE 50 YEARS AGO BUT NEVER-BUILT. McBRIDE WAS SO MUCH IMPRESSED BY CABOOSES THAT HE TRIED TO ADAPT THEM TO PASSENGER SERVICE ON SCENIC ROADS
(From the Pullman News)

OLD, ABANDONED, 1½-MILE SPUR OF FRISCO LINES AT KANSAS CITY, MO., UNUSED SINCE 1914 AND BURIED BY LANDSLIDES, RECENTLY YIELDED 80 TONS OF MUCH-NEEDED SCRAP IRON

A HEISLER locomotive pulling half a dozen rack cars grinds its way up the long curving grade toward the Junction. Far below in the valley a little clearing is visible through gaps in the trees; that is Brookston, once a sawmill town, now empty and deserted. With gears clanking and the sound of her exhaust coming in short thick jerks, the little engine rounds the bend in sight of the wooden station, all that remains of Sheffield Junction.

The crew of a battered Mogul waits on a siding to pick up the string of racks and take them down to Hallton. When the transfer is completed, the Heisler's engineer takes the signal from his conductor, and eases off on the throttle for a slow descent of the grade.

Hauling a few trainloads of scrub pine

Gone Are the Days When Big Timber Rumbled Down the

Tionesta Slim-Gage

By Sgt. R. W. RICHARDSON

to Sheffield Junction for transfer several times a week—that was the schedule of the Tionesta Valley Railway at the tag-end of her career. The last narrow-gage road in the Pennsylvania lumber country outlived the days of big timber which made it prosperous, and when most of the scrub second-growth was cut from the hillsides, the Tionesta's business was gone. One day in June, 1942, the veteran crew spotted their Heisler at the Junction for the last time.

Narrow-gage lines once threaded their way around many of the hills in northwestern Pennsylvania. In the years after the Civil War that area of the Keystone State was littered with boom settlements created by the exploitation of oil and big timber. The smaller type of road

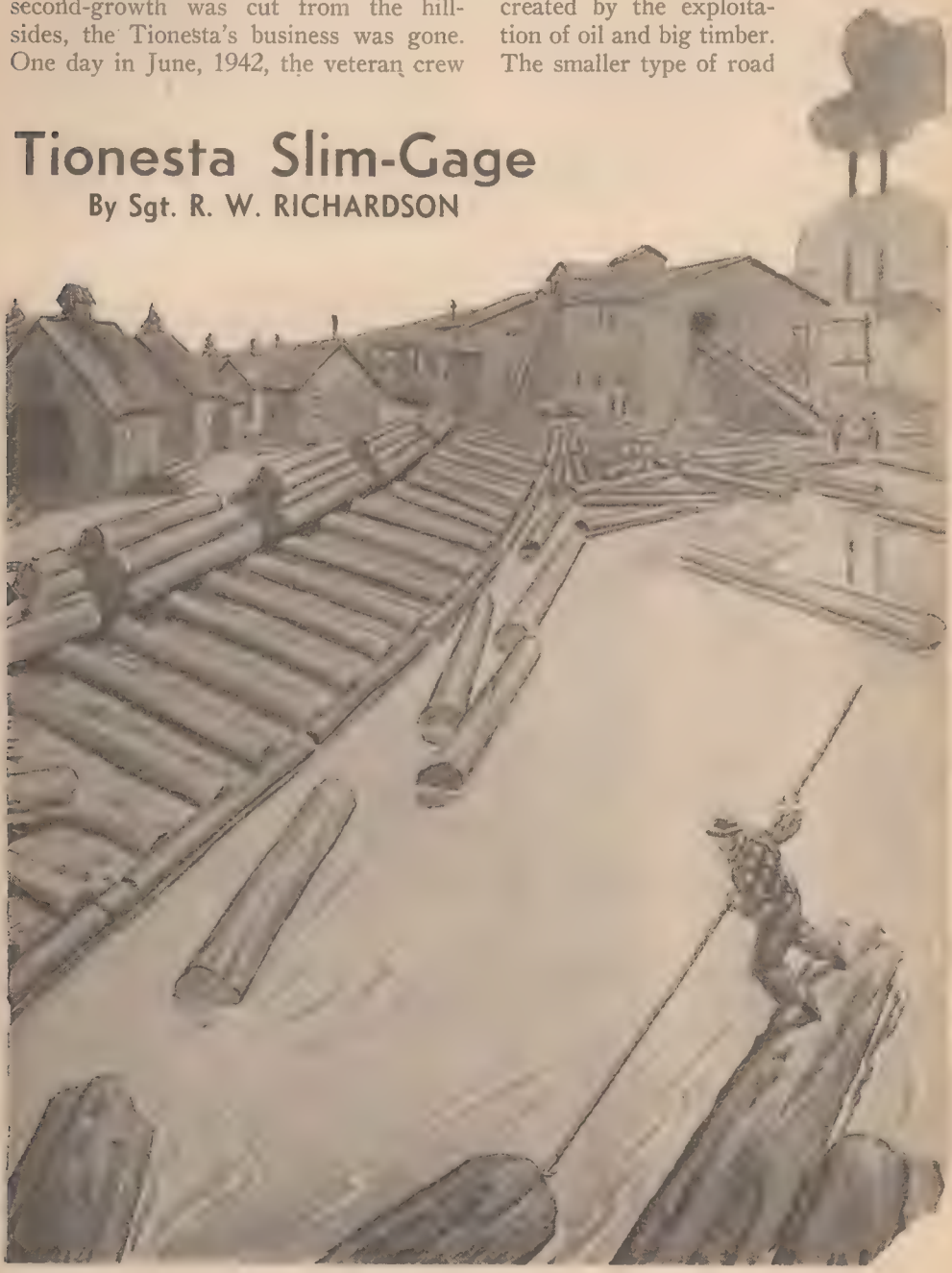


Photo by Sgt. Robert W. Richardson

STEAM SYPHON drew water up from old tender tank which replaced one of the Tionesta's wooden towers. Abutments of the original structure appear at left

had little to do with the fight for control of the petroleum traffic—in Pennsylvania that is the familiar story of the Atlantic & Great Western, the New York & Erie, and the PRR. But narrow-gage lines were favored in the steep valleys for hauling big timber, where their roadbeds could be built more cheaply and operating costs were lower.

The Tionesta Valley Railway was only one of many slim-gage ventures in the Keystone State. The line was begun in 1882, when the growing sawmill town of Sheffield in the rich timberland of Warren County needed a rail outlet for its products. The first section of TV connected Sheffield and Sheffield Junction, thirteen miles to the southeast, where the narrow-gage Pittsburgh, Bradford & Buffalo, later Pittsburgh & Western, had its northern terminal by 1881.

From the Junction, TV construction was continued in the eighties, down across the corner of Forest County to Hallton, on the Clarion River. Tionesta officials had twenty-nine miles in operation when they took over the Warren & Farnsworth, a short pike built into Cherry Grove, an oil boom town west of Clarendon. To connect its two lines, the TV extended its road north seven miles to Clarendon, running along the level in the Valley, parallel to the Pennsy.

In its heyday, the Tionesta Valley Railway operated both passenger and frieght trains over its line from Sheffield to Hallton, plus the route from Cherry Grove via Clarendon to Sheffield Junction. The roundhouse at Sheffield sheltered an array of Heisler, Climax, American and Mogul engines in excellent repair. Loggers' settlements along the line grew into busy mill towns and the Tionesta carried the region's wooden wealth down to industrial markets over a well-kept roadbed of winding grades and torturous curves. Branch lines reached up the narrow side-valleys—one of them was fifteen miles long—ending in steep switchbacks. Big trees, loaded a section to a car, were carried in quantity, and the Tionesta became a prosperous little road.

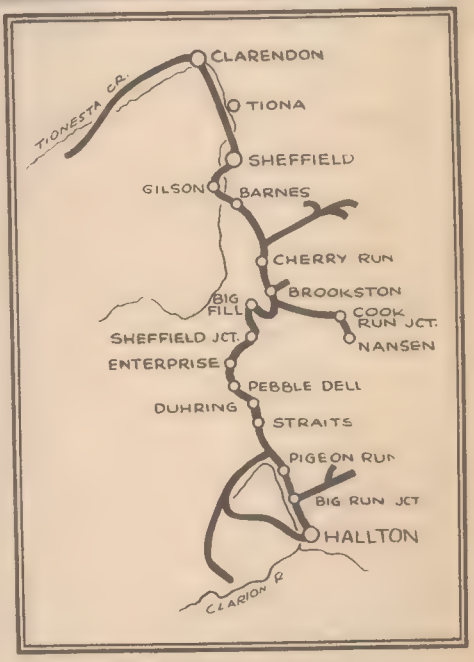
Everybody knows how the extravagant logging methods of the times stripped the mountains and left stump-strewn hillsides where only scrub second-growth took the place of the big trees. The TV supplied shipments of this "chemical wood,"

Photo from D. H. Kirkwood, Foxburg, Pa.

SMOKE plumes against the hills. Mogul No. 10 heads south with a load for the chemical plant

used in producing acetic acid and charcoal, to plants at Gilson and Hallton. The road became one of the enterprises of the United States Leather Co., which operated it in connection with two other rail lines, the Central Pennsylvania Lumber Co. and the Clarion River Railway. The leather producers wanted the TV as a route for supplying bark used in its tanneries. Until the end of the first World War, the TV returned a profit to its owners, and the small but active line had already survived numerous other narrow-gages.

The threadbare thirties wiped out many of the remaining slim-gage carriers in the country, but the Tionesta hung on longer than most. Sheffield's large planing mill closed, the chemical plant at Gilson was destroyed by fire, and the supply of scrub along the branch lines was slowly disappearing. The little narrow-gage line continued to take lumber to the Junction for transfer to Hallton; this freight was trucked to Sheffield and poor roads still made the TV the best route to the chemical factory on the Clarion River. But only a few trains a week, plus some local switching for the nearby PRR-Erie Williamport



ROUTE of the Tionesta Valley

line—slim-gage yards at Sheffield were equipped with a third rail to handle standard-gage boxcars—meant the end of the Tionesta Valley Railway.

By 1935, the Tionesta was seeking ICC permission to abandon the sixteen-mile stretch between Sheffield Junction and Hallton. This trackage was later sold to the Clawson Chemical Co. at Hall-

ton, along with one of the TV's Moguls, which continued to take the rack cars from the Junction. The old Warren & Farnsworth line had been torn up some years before, and after the sale of the Sheffield Junction-Hallton trackage, the road to Clarendon was also abandoned.

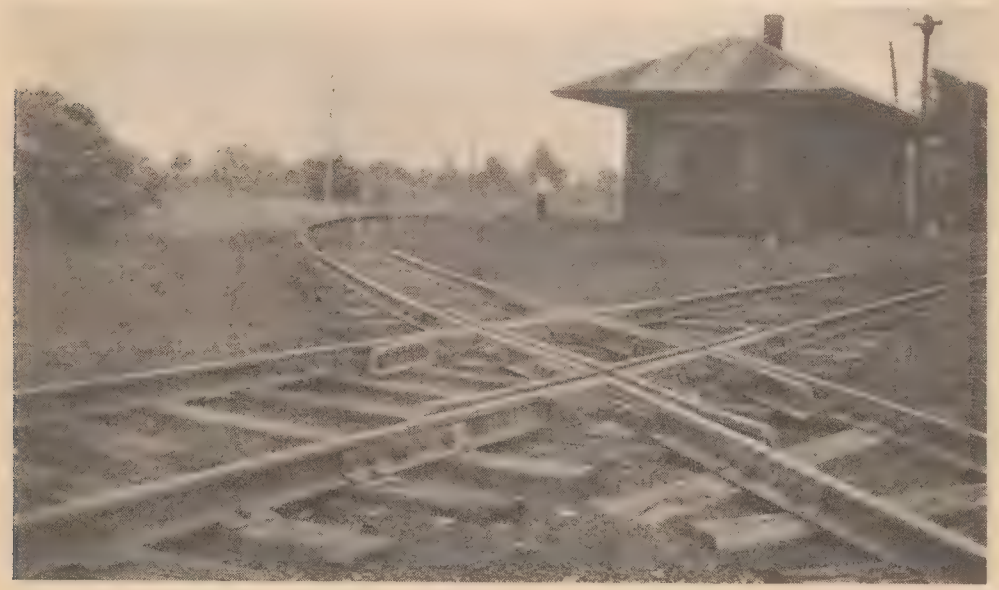
SEVERAL years ago a familiar sight in Sheffield on week-day mornings was a Heisler, Number 16 to 19, chuffing importantly around town with a string of standard-gage boxcars. When they had completed the local switching, the crew would sort out a few of the little wooden rack-cars, couple on one of the home-built cabooses, and set out for the hour and a half trip to the chemical wood loading spots on the East Branch, the only one open in recent years. Then, on alternate days, the loaded racks were taken down to the Junction for transfer to Hallton via the old TV main.

The route from Sheffield to the Junction runs along a little valley to Brookston, then winds sharply up through the hills in a series of horseshoe curves. The long pull usually required doubling; the Heisler would bring ten or twelve loaded racks to Brookston, and then haul up five or six

THE *WILD PIGEON* was the Tionesta's first passenger engine. Here she is at Sheffield, thirty years ago

STANDARD - GAGE tracks of the B&O cross the Tionesta's line at the Junction, now deserted

Photo from D. H. Kirkwood



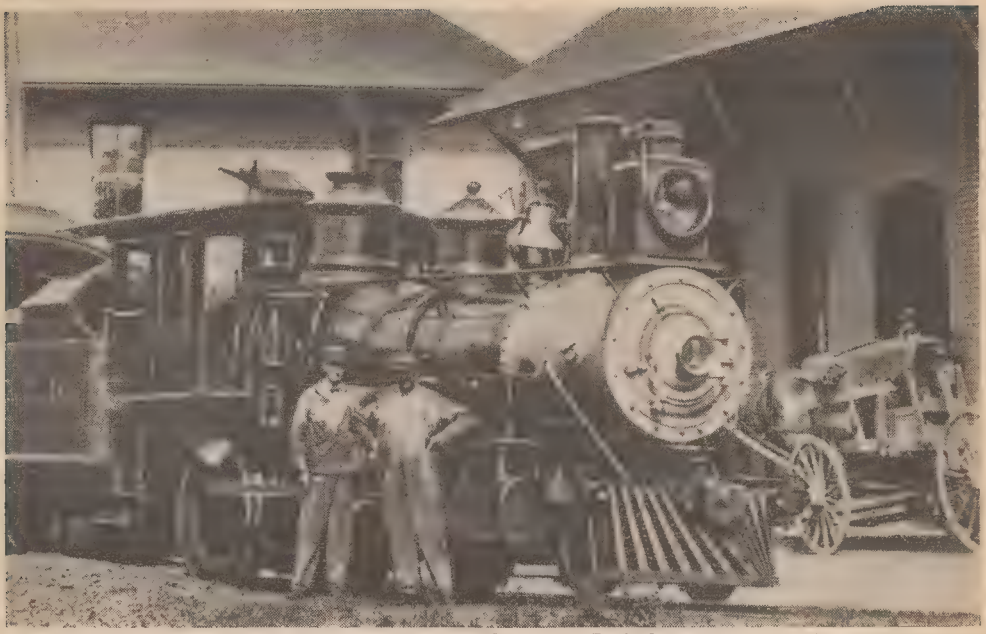


Photo from R. Collom, 491 Walnut St., Meadville, Pa.

cars at a time. The powerful little geared engine would send up a tall column of smoke and the quick cadence of her exhaust belied an average speed of about five miles per hour. Rain or dew on the tracks could bring the train almost to a standstill, but a little jockeying of the throttle would always get her under way again—an obvious advantage of the geared engine over the rod type.

The Big Fill, so named on the Tionesta's brief operating timetable, is the longest horseshoe curve on the line, and the last before the Junction is reached. At the approach to this curve, the conductor, if he wanted to get his Junction paper work done early, could jump off, walk up a steep path to the upper level of the track, and be at the little station half an hour before his train chugged into sight.

The Heisler's trip back to Sheffield, downgrade with empties, was only a little faster than the trip up, since the curves and the condition of the track made speed impossible. Besides, the effect of slack running in and out on the non-air rack cars was bearable in the caboose at low speeds only. One stop on the return trip for water, and an hour and a half after leaving the Junction, the Heisler would be back in the Sheffield yards.

There was a time when the Tionesta ran three passenger trains daily out of Sheffield, in addition to the regular freights. A Brooks-built 4-4-0, the *Wild Pigeon,* was passenger locomotive No. 1 when the first train pulled out of the little brick depot, back in 1882. In later years two runs were made to Brookton and back, and a third run to Hallton. The Tionesta never owned much passenger equipment, however, because the narrow-gage Pittsburgh, Bradford & Buffalo ran through trains from Foxburg to Sheffield via the Junction over TV trackage. This arrangement continued after the PB&B became Pittsburgh & Western, later a subsidiary of the B&O, until 1911 when it was converted to standard gage. Freight cars, too, were interchanged with this B&O line, but it was a one-way trade after their cars were equipped with air-brakes, for none of the Tionesta Valley equipment ever reached that stage of modernization.

Sheffield Junction, like so many of the towns along the road, was once a busy interchange point for passengers as well as a thriving town made important by its

Photo from W. A. Lindberg, Sheffield, Pa.

HEISLER NO. 16, last engine in service, at a loading spot on one of the branch lines

location in the timber country. Today the depot is locked and silent; the railroad eating house, which did a good business in its time, is gone, and stores and houses have been razed or stand empty. Weeds choke the wye and the few sidings. When the big trees were used, the Junction, like other stops on the railroad, became a deserted village.

OF ALL the towns served by the line, Sheffield remains something of what it was, with a few local industries and a stop on the Pennsy's Erie-Williamsport line. Here the Tionesta maintained its shops, well-equipped considering the size of the road. Its workmen kept the Heislers and Moguls in good repair, and handled numerous overhauling jobs for other small lines in the vicinity. A veteran Swedish carpenter built and repaired the little cabooses; he never saw a blueprint, but merely followed the directions of the Superintendent.

A good part of the Tionesta's business depended on these shops and the yard at Sheffield. Subsidiaries of the slim-gage, the Central Pennsylvania Lumber Company and the Clarion River Railway, sent their motive power to Sheffield for repairs and overhauling. The CRR is standard-gage, but its engines were brought to the shops mounted on narrow-gage trucks, a simple matter with the geared type.

Since the TV yard at Sheffield was equipped to handle regular-size boxcars, the road has taken care of switching industrials shipments from the neighboring Pennsylvania Railroad. The Tionesta once helped the giant Pennsy out of a jam, because of those three-rail yard-tracks.

The Williamsport-Erie line was tied up by a wreck near the Sheffield depot and alert officials, anxious as usual to find a quick way to move the next passenger train, remembered the TV's maze of tracks. Soon a little Mogul was switching a big train of coaches and Pullmans around the scene of the wreck. Do narrow-gage fans know of a similar incident on other roads?

A rival company made use of the Sheffield shops also; this was the recently abandoned Sheffield & Tionesta, a standard-gage line which followed the southwesterly course of the Tionesta Creek. TV officials had tried to obtain trackage rights on the S&T years before, but were refused; they built one of their branch lines on the opposite side of the creek instead. Old-time rivalry may have had something to do with a near-wreck that narrow-gage men still talk about.

The two lines cross near Barnes, a stop just below Sheffield. One day two engines had an unscheduled meet at this point, the only consequence being a hard blow to S&T pride, for the TV's engine knocked the bigger job off the track. As long as the two roads operated trains, each maintained that it had the right-of-way, but so far as is known, there was never a second duel to prove who was correct.

The Sheffield & Tionesta sent in the last locomotive to be completely overhauled at the TV's shops, and the old Porter Mogul was the center of one final dispute between the two companies. When the repair job was completed, TV presented the bill, but officials of the standard-gage outfit handed in one, too. It seems they found a record of several kegs of spikes delivered to the Tionesta Valley, which had never been paid for. Oldtimers tried to recall the incident and the Tionesta's books were studied, while the S&T'S Mogul rested on a siding for months, pending the outcome of this financial tangle.

Motive power on the Tionesta at the end of its career had seen as much service as the men who handled it. The standbys for the logging trains were several Climaxes, rarely used in later years, and the Heislers, the road's newest equipment bought during the first World War. Numbers 16 and 19 were the last on the road, chunky little engines that sported balloon stacks in the summertime when there was danger of forest fires. Engineer Will Lindberg, who retired in 1940 with a service record that began in the nineties, says that the old oil-burning headlights

Photos from D. H. Kirkwood and W. A. Lindberg

TIONESTA'S MAIN stretched south from Brookston, where a branch line curved into the hills

SHORT strings of varnish once ran regularly over the narrow-gage road

Photo by Sgt. Robert W. Richardson

CONVERTED for use on the standard-gage Clarion River Ry., this Heisler, Number 17 on the Tionesta roster, was never relettered

caused him more troubles than TV's twist-made his last run.

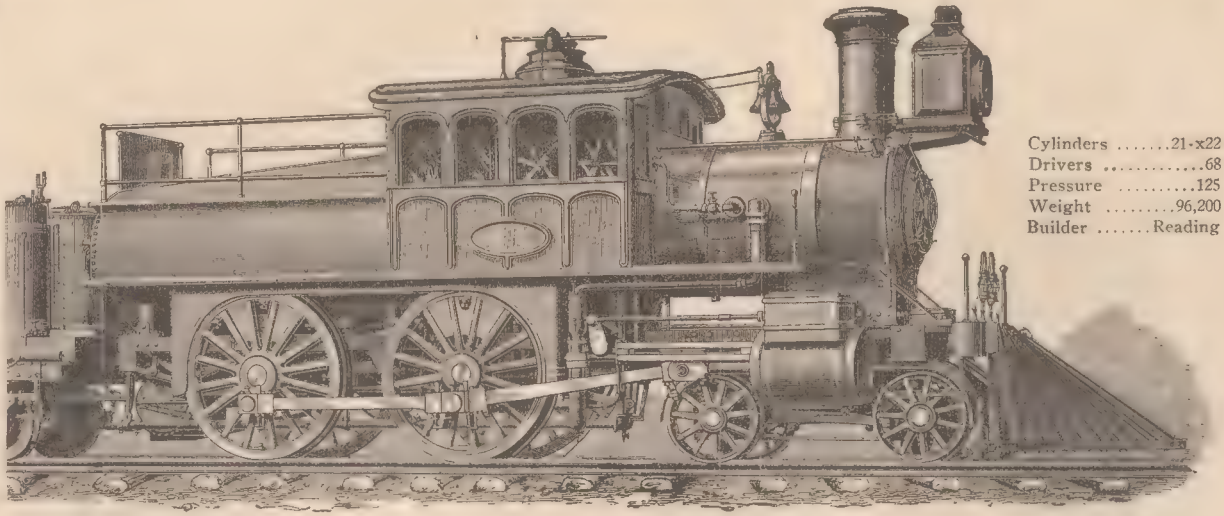
Engineer Lindberg was the senior member of the Tionesta's only crew. In its last years the road never needed an extra list, for the four regulars could handle the few trains going to the Junction. Jim Jones, who held seniority as engineer also, was the regular fireman, and Brakeman Harry Nelson and Conductor John Munson completed the crew when Engineer Lindberg made his last run.

After Will Lindberg's retirement, Jim Jones took over the right-hand side, and Miner Nelson, another veteran, fired for him. Jim likes to tell how he became a full-fledged engineer in his 'teens, back in the rough and tumble days when the TV's line ran through a string of loggers' camps and Sheffield was a wide-open boom town. None of the older engineers wanted to waste time on the passenger train; the schedule at the time required them to lay over at Duhring, a small lumber camp south of the Junction, and the men preferred to be nearer the bright lights and saloons at Sheffield, Jim says, so he got a run nobody wanted.

Any man in the Tionesta's crew could tell you a good many stories about railroading on a narrow-gage line in rough, hilly country. Winter brought snow storms—"worse than anything we have nowadays"—and the engines had to buck their way on tracks that weren't cleared in advance, for the company never had a plow. Spring freshets meant floods that endangered bridges and weakened an always treacherous roadbed. Heavy underbrush along the right-of-way concealed the rocky dens of rattle snakes, native inhabitants of the region. The regulars used to laugh about an erstwhile brakeman who had such a fear of rattlers that he carried a long stick to swish through the grass around switchstands before he'd venture close enough to throw the lever.

The Alleghany hills have echoed for the last time to the sound of a Tionesta engine fighting its way up the long grade to the Junction. For years the Heisler pulling a string of rack-cars and puffing heavy smoke through its balloon stack was a sight reminiscent of a lost era in railroading. Narrow gages could once compete with the bigger lines, when a special job like hauling timber or a rough terrain like mountainous northern Pennsylvania made their kind of roadbed an asset. But the lumberjacks have gone, rails rust in the clearings that mark the one-time existence of loggers' camps, and the Tionesta Valley's main line stretches deserted and silent through the woods.

The Rip-track ALBUM



Cylinders 21-x22
Drivers 68
Pressure 125
Weight 96,200
Builder .....Reading

Philadelphia & Reading Swallow-Tail

Anthracite-burning locomotive designed by J. E. Wootten for fast passenger service on the P&R, the 411 was much criticized by motive power men because her broad firebox, placed entirely above the drivers, produced a high center of gravity. Its shape and swinging action earned for this type of engine the nick-name "Swallow-Tail." In fairness it should be added that no difficulty was ever experienced from rough riding nor was a derailment ever recorded for this class.

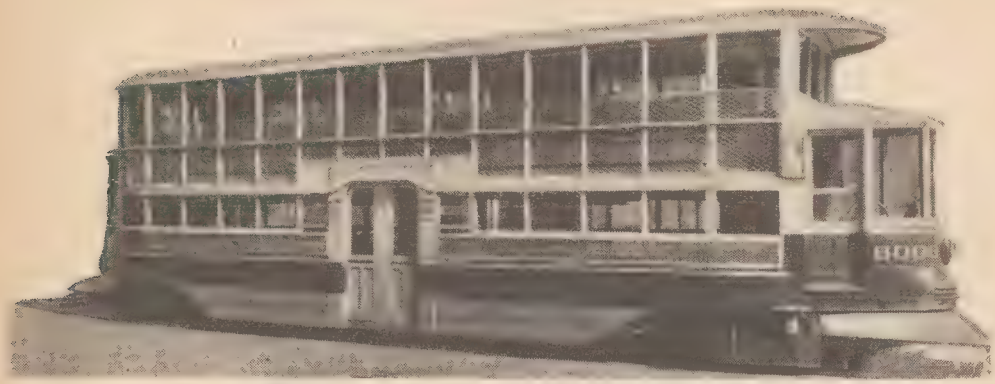
Locomotives of the Tionesta Valley

No.	Name	Type	Builder	Date	Notes
1	*Wild Pigeon*	4–4–0	Brooks	1882	Scrapped, 1935.
2	*Black Bear*	2–6–0	Brooks	1883	Scrapped, 1937.
3		2–6–0	.....	....	Formerly Warren & Farnsworth. Scrapped.
4		4–4–0	Wyoming Valley	1882	Formerly Warren & Farnsworth No. 6. Sold to Pickett Lumber Co., 1902.
4	(2nd)*	0–6–0	Baldwin	1891	Formerly Susquehanna & New York, and Central Penna. Lumber Co. Scrapped.
5		4–4–0	Wyoming Valley	1882	Formerly Warren & Farnsworth No. 5. Scrapped.
6		2–6–0	Brooks	1898	Scrapped, 1937.
7		2–6–0	Brooks	1900	Scrapped, 1937.
8		4–4–0	Pittsburg	1883	Formerly Baltimore & Lehigh No. 6, and Maryland Central No. 6. Scrapped.
9		2–6–0	Alco	1901	Scrapped, 1939.
10		2–6–0	Alco	1904	Awaiting scrapping.
11		0–4–4–OT	Climax	1907	Scrapped.
12		0–4–4–OT	Climax	1907	Scrapped.
13	This number omitted				
14		0–4–4–OT	Climax	1900	Formerly Elk & Highland, and / or Susquehanna & Eagles Mere.
15		0–4–4–OT	Heisler	1904	Formerly Central Pennsylvania Lumber Co. Now used at Sheffield mill.
16		0–4–4–OT	Heisler	1920	Awaiting scrapping.
17		0–4–4–OT	Heisler	1916	Originally 35-inch gage. Now Clarion River No. 17. Standard gage.
18		0–4–4–OT	Heisler	1916	Used on Clarion River standard gage at times. Boiler sold in 1939.
19		0–4–4–OT	Heisler	1919	Sold to Clawson Chemical Co. in 1942.
20*		2–6–0	Baldwin	1904	Formerly Susquehanna & New York No. 108. Scrapped.
21		0–4–4–OT	Climax	....	Formerly Susquehanna & Eagles Mere, and Central Penna. Lumber. Scrapped.
22		0–4–4–OT	Climax	....	Formerly S&EM, and CPLC No. 22. Awaiting scrapping.
23		0–4–4–OT	Climax	....	Formerly S&EM No. 3, and CPL Co. No. 23. Sold for boiler in 1940.
24		0–4–4–OT	Climax	....	Formerly S&EM No. 1, and CPL Co. No. 24. Awaiting scrapping.
..	*Dewey*	0–4–OT	.....	....	Formerly owned by Tiona RR, a small logging line serving Tiona Refinery.

**Standard gage. No. 4 was used for mill switching. No. 20 served Clarion River branch.*

Note: This roster was compiled by Sgt. Robert W. Richardson, with the assistance of D. H. Kirkwood, B & O agent, Foxburg, Pa.; C. L. Collom, Meadville, Pa.; Ernest C. Miller, Warren, Pa.; and crew members of the Tionesta Valley.

Electric Lines



Two photos from Sidney B. Silleck, Jr., Country Club Apts., Hartsdale, N. Y.

The Hobble-Skirt Car

THEY called 'em "hobble-skirt cars" because—well, you don't have to be very ancient to remember the long dresses, narrow at the ankles, that obliged fashionable ladies of approximately thirty years ago to take short, mincing steps. The Beau Brummels of that generation, you may recall, sang a little ditty which began,

"Come all you fellows, if you want to flirt,
Here comes a girl in a hobble skirt—"

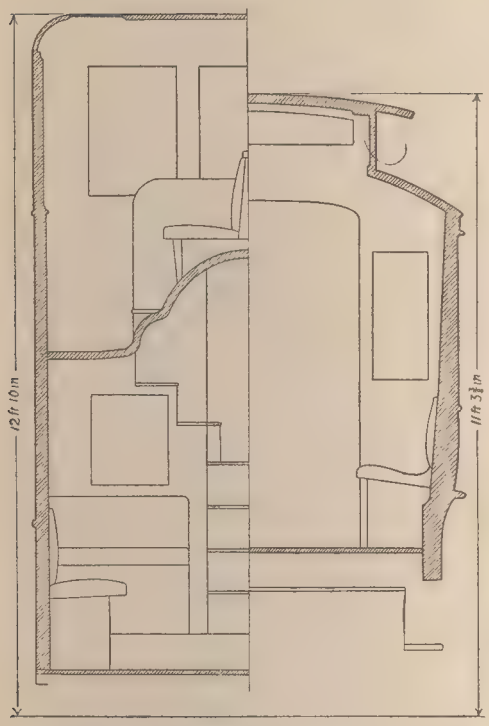
and went on to mention how difficult it was for one of those creatures to board a high-step trolley without exposing her silk hosiery—which in those days was considered truly shocking. Around that time a new type of car was designed for convenience of ingress, also to hold a large number of passengers. The city wags named it a hobble-skirt car because of its obvious advantage to female passengers whose tight gowns did not permit them to step up gracefully.

The real purpose of these cars was to facilitate loading and unloading— an important factor in transit operation. Various methods of getting passengers on and off quickly had been tried with little or no success. You see, the general construction of streetcars in those days called for bodies to be set on top of trucks. With equipment operating on city streets it was hardly possible to add more than one step to the ground, since the steps would either be too narrow or project out from the car, causing an added traffic obstacle. Platforms at door level were possible on elevated lines and on right-of-way routes, but could not be used in the streets.

Realizing there was no way in which the city thoroughfare could be brought up to car door level, the two men who worked on this task tried to find a way of bringing the car floor as close as possible to the street, and still have a trolley that would run in New York's city traffic. The result was the so-called stepless or hobble-skirt car. Its invention was credited to Frank Hedley, General Manager of the New York Railways Co., and J. S. Doyle, the company's Superintendent of Car Equipment. Plans for this car were made public in February, 1912.

Although there was nothing new in any of the features combined to create this car, yet the manner in which the drop-sill, maximum traction truck and center entrance were combined was really an innovation. The car was a double-truck, double-end, center-door type. Its body was swung between sets of trucks that were placed at each end. By means of a drop-sill the floor level between the trucks was only ten inches above the rails.

Conducted by
STEPHEN D. MAGUIRE



"BROADWAY BATTLESHIP": exterior view (page 74), interior (below), and half of cross-section diagram as compared with an ordinary streetcar. This double-decker would not have been possible without the "hobble-skirt" design

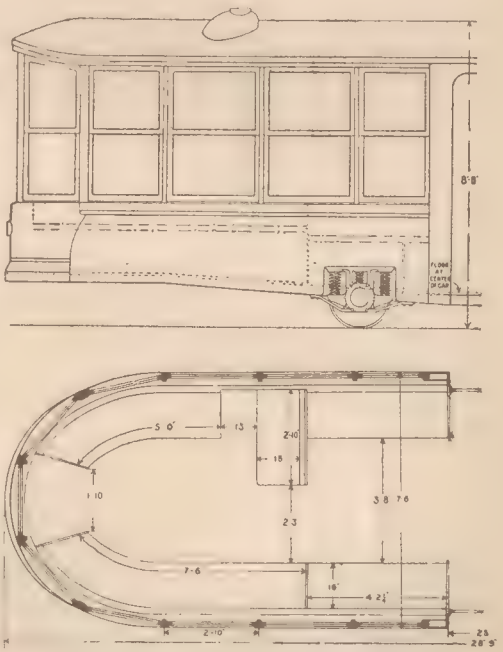
The Maximum Traction truck was used. This was a four-wheel truck, the two wheels nearest each end of the car being of normal height and housing the motor, while the other two wheels were smaller and the truck frame sloping down toward them. By this means the low floor was continued even into the car trucks. The car floor extended over the trucks, narrowing down at the ends, to fit in between the side frames just above the small wheels. A motorman's cab was perched atop the highest part of the truck at each end of the car, making available every bit of space that could possibly be used.

Plans for the new car were sent to J. G. Brill Co. for construction on February 29th, 1912. The first car was completed March 8th, only ten days later! The immediate popularity that greeted this experiment resulted in the construction of a large fleet, 176 in all. Soon New York streets were swarming with hobble-skirt cars. If you recall seeing photos of New York after the Armistice of 1918, you may remember several such cars in the background, as they were in general use on all New York Railways lines in that period.

An experimental double-deck car—the famous "Broadway Battleship," No. 6000—was built along the same lines. Its failure to achieve popularity was due to its size rather than to the basic stepless construction. New York Railways also built

Photo from George E. Votava, now overseas with U. S. Army

NO. 5000, "hobble-skirt" car, on New York's Broadway Line at 7th Ave. and 59th St. Diagrams show the smallest step-less trolley ever built, a predecessor of the Birney



116 small, single-truck, battery vehicles for use on horse-car routes, numbering them 7000's. These had the same type low floor and a single center door, but were single-truck and shorter than the 5000 series.

Several cities outside of New York bought hobble-skirt cars for their own use, all based on the plans of Hedley and Doyle. Among the cities were Los Angeles and San Jose, Calif., and Vancouver, B.C., Canada.

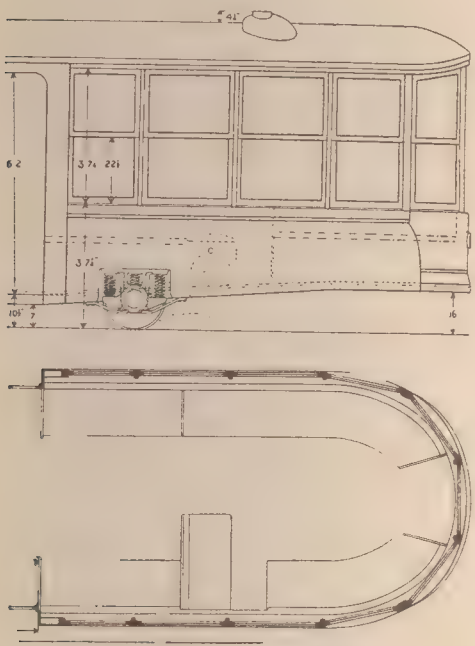
One of the most popular features of this kind of rolling stock eventually caused its downfall. The convenient center-door arrangement was fine for two-man operation. With the advent of one-man handling that commenced during the first World War, the "hobble-skirt" was found unsuitable. New York Railways, along with many other lines, realized the economy of one-man operation; but discovered that the cars could not be rebuilt for that purpose, as there was no convenient place to put an end door without extensive and costly alterations.

So, when the Roaring Twenties arrived, the hobble-skirt cars were quickly taken off the streets. Older cars, cumbersome and slow, took their place. The latter were operated as one-man cars, with financial saving to the company, but great discomfort to the riders and aggravation of the Nation's unemployment problem. The old

cars, eyesores though they were, continued to operate until the last New York Railways car was discarded in 1936, twelve years after the hobble-skirt cars were scrapped.

* * *

ODD CAR. Harry Cotterell, Jr., 36 Alexander St., Newark 6, N. J., describes an unusual articulated car that used to run in the New York Metropolitan area—one he believes few readers ever saw. Officially numbered 235 on the New York & Queens County Ry., this piece of equipment was commonly referred to by the M. of W. Dept. as the "60-foot railcar." It was built at the company's Woodside shops from two single-truck open-bench cars, the sections being joined together by a wooden "coupler" about

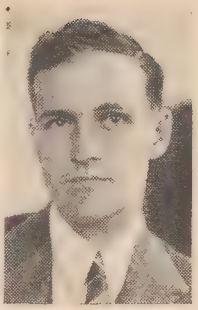


20 feet long, made from a 12x12-inch timber fitted into a swivel on each body.

Harry says it was fascinating to see this car trundling a load of long, heavy rails, its speed retarded only by hand brakes. A brakeman always rode on the hind end, twisting a brass stem-winder to brake the rear section.

He adds: "I want a photo of this car."

Car Barn Chatter



Steve Maguire

ODD NUMBERING. We've heard much about unusual systems employed by electric railways for numbering their equipment, but this goofy idea takes the jackpot.

We learn from George Houk, Jr., R. R. 7, Dayton, 8, Ohio, that the City Railway system, Dayton's only remaining juice line, classifies its trolleys so that the last digit in each number is 2. Gasoline-powered busses end in 4 and trolley busses, 6. Thus, No. 302 is a trolley car, 304 is a gas bus, and 306 a trolley bus. So if you see photos of Dayton trolleys 672 and 842, identical in appearance, don't be misled into thinking there are almost 200 cars of this type in Dayton. Only one number in ten is used on a streetcar, and that one ends in 2. Who can tell us how this system orginated?

* * *

HARRIET E. WILSON, mentioned in our December issue as having donated much C&LE and Ohio Electric material to the Ohio Archeological & Historical Society, spent hundreds of hours during the past 5 or 6 years collecting those old photos, clippings, timetables, tickets, etc., traveling all over the state on her quest.

"Whatever rare photos she obtains are generously made available to anyone interested," writes Don McClain, 105 E. 3rd St., Cincinnati. "Her stock phrase is, 'if any of the boys want copies of these, they are welcome to them.' One of my prized possessions is a painting of the C&LE's last run, by Miss Wilson, who is an artist of no mean merit."

We are glad to publish this tribute to a high-calibre juicefanette who was reared on the Ohio Electric main line and takes her interurbans seriously.

* * *

THE ELECTRIC INTERURBANS. This proposed book, sponsored jointly by the Ohio Archeological & Historical Society and the Electric Railroaders' Ass'n, Cleveland Div., was to have been published by the WPA and its Ohio Writers Project; but the WPA folded up in 1941 in time to prevent actual printing, although the manuscript was (and is) complete.

SNOWBOUND car 858 on Reading train snapped by George M. Hart near his home at Doylestown, Pa., Feb. 15th, 1940

"Naturally, some of those who paid for the book in advance wonder what happened," writes Herman Rinke, ERA national secretary, 152 W. 42nd St., N. Y. City. "I am certain our Cleveland Division can and will reimburse any individual who desires to retract the prepayment part of his order. Efforts are still being made to have the printing financed, but we need about $1500."

* * *

ST. JOSEPH'S VALLEY RY. was discussed historically in the Nov. '43 *Eastern Ohio Bulletin,* a mimeographed 8-page journal issued by the National Ry. Historical Society, Eastern Ohio chapter; Wm. Schriber, sec., 184 24th St., S. E., Massilon, O. This brochure is free to members, 50c a year to others. The article was written by Joe Galloway of Toledo, Ohio.

* * *

BOSTON ELEVATED. "Some time ago, mention was made of streetcar runs using various levels of track," recalls Charles Homan, 199 St. Botolph St., Boston, Mass. "Well, I think my run on the Reservoir-Lechmere line of Boston Elevated Ry. has enough levels to top any other."

"Starting in Brighton," he explains, "we run on reserved track through Brookline to the Boston city line. Here we go into a subway and pass under the tracks of the Boston & Albany steam road. After stopping at Kenmore station we pass under the Muddy River and travel along going under more tracks of the B&A at a point where the Dudley-Harvard surface line is just above the B&A track. At Park Street we are still in the subway, but trains of the Dorchester-Cambridge tube line are down under us. Next stop, Scollay Square, we find the East Boston tunnel line below our car. On to Haymarket, we climb the ramp and stop at North station, where we are elevated. Continuing on the El, we pass over the Charles River and finally drop down to earth at Lechmere station in Somerville. Round trip is 16 miles, time 80 minutes. I'll be glad to answer questions about the Boston Elevated."

If you query Charles Homan, don't forget to enclose the usual addressed stamped envelope. We now hear from another Boston El employe: Edward E. Wood, Jr., motorman-operator and extra starter, 68 Needham St., Dedham, Mass.

"It's interesting to read about other roads," Ed writes, "but you can't help preferring your own. What a thrill it is to find on some other line a car that once ran on your system—a car you've ridden in or maybe even have handled! You observe that the clip on the 'short handle' is still broken, where you yourself snapped it when you used the blasted thing to hammer a stubborn governor. So here she is, halfway across the country! How you boil when you hear the motorman refer to her as 'an old hunk of iron,' although you know darn well she was the most flat-wheeled, sway-backed, contrary old rattletrap in your own division!

"Pride? Your copy of *Railroad Magazine* arrives about the first of the month. You scan through it, glancing at the pictures and headings. Swell! You note the new equipment. Great stuff. They should get something like that on our line. You look some more. An old-timer, much like old 271. Then, as you turn a page, there appears an old, familiar scene. Perhaps a station, a cut or a bridge. It brings back something you figured the world had forgotten. And somebody had thought enough about your pet to make a picture of it! You scan that picture eagerly, drinking in every detail."

Photo from Guy H. Peifer, 20 Cottage Place, Port Richmond, Staten Island, N. Y.

TWO CONVERTED COACHES ran on the electrified Cumberland Valley (now PRR) between Dillsburg and Mechanicsburg, Pa., from 1906 through January 15th, 1928. Offset trolley wires necessitated four poles for each car. The above scene was Williams Grove, Pa., and the date August 15th, 1909

HIGH-SPEED CARS, built by Budd, on the Philadelphia & Western

HIGH POINT LINE. "Having worked for the Duke Power Co., in nearby Greensboro, N. C., as a civilian, I can supply information on the trolley line in High Point, N. C., mentioned in November issue," writes Capt. W. J. Burton, 138th Ord. Maint. Bn., Camp Campbell, Ky., sending us these facts:

Prior to 1932 the North Carolina Public Service, now Duke Power Co., operated a street railway in High Point. This being an important industrial city, local switching service was given over the streetcar tracks. When it was decided to replace cars with busses the mills were in danger of losing their railway connections. This problem was solved when the Power Co., gave the entire line to the High Point, Thomasville & Denton Railroad, a small but progressive industrial steam road.

Under the agreement, the Power Co., retained the trolley wires and power transmission facilities, and now sells power to the railroad company. The meter for the service is located on the one trolley that they own! So we have the unusual situation of track owned by one company, trolley wire by another, and the meter reader chasing all over town once a month to find the trolley and see how much power it has consumed.

The car is operated only a few hours each day, and power is generally off. When they decide to do switching, the company calls the Power Co. office and then goes back to the car and start the motor-generator that supplies current for the engine.

In 1938 the switching service was curtailed somewhat as a result of the Southern Railway crossing elimination program in High Point. When tracks were lowered through town no one was willing to build a bridge for the HPT&D to cross over the Southern Ry. cut. Thus mills on the opposite side of the tracks from the HPT&D yards became isolated and lost their switching service.

The electric locomotive used in High Point is one of the old streetcars, stripped to the flat bed, with a box cab in the center.

* * *

ROOF HEADLIGHT. Two readers write us that the headlight on the roof of Birmingham trolleys is for use in interurban

Photo by Lt. William C. Janssen

GEORGIA sunlight heightens the bright red and cream color of this ex-Nashville-Franklin car as she passes through Atlanta enroute to Stone Mountain, a scenic spot famed for its portraits of Confederate leaders

Photo from Lewis Wilcox, 44 Arnold Ave., Providence, R. I.

FUNERAL CAR of the now abandoned Providence & Danielson Street Railway in Rhode Island. Perhaps some old-timer can recognize a familiar face in this group of P&D employes

running. The two are Norman Rolfe, Brunonia 11, Brown Univ., Providence 6, R. I., and Pvt. Joseph Kish, 434 F. A. Bn., Fort Benning, Ga., both send this information.

Joe adds: "Having recently ridden the Birmingham lines to Bessemer, Ala., 11 miles distant, with return via their alternate route from that city, I can say that the running is distinctly interurban style, fully half of the travelling being in open country."

* * *

NEW EQUIPMENT. It's not often we can list the number of cars to be built and lines they will run on, in advance of construction. Through the WPB some 300 new PCC cars will be built this year, allocated as follows: Pittsburgh, 100 cars; Boston, 85; Washington, 75; Baltimore, 40.

* * *

NEW FRANCHISE. In a special election the voters of Waterloo, Iowa, approved extension of the Waterloo, Cedar Falls & Northern franchise for operation of its interurban, city and bus lines for a 25-year period. Elmer Carr, Ottumwa, Ia., advises that the streetcars are now running on the city line between Cedar Falls and Waterloo. About two years ago this route was given up in favor of busses; but busses couldn't handle the traffic, so the trolleys roll again over tracks that, fortunately, were left in place after abandonment.

West Coast News

SAN FRANCISCO. A complete shuffling of the local streetcar lines has been recommended by the ODT for the purpose of obtaining maximum efficiency, reports Roy Covert, Co. B, 4th Bn., Camp Kohler, Calif. Roy says that the recommendations, planned ostensibly to carry the local railway lines safely through the days when the Pacific becomes the major theater of war, were publicised only after much investigation by ODT.

Opposition has been aroused because the plan seems to favor the Market Street Railway over the public-owned Municipal Ry.

Roy sends the ODT plan in a nutshell: "Of the eight ocean-bound trolley lines, five (all M. S. Ry.) would be cut back two miles from the sea.. Competing and duplicating lines throughout the city would be eliminated, and the famous four-track menace on Market Street may be reduced by one track. Market St. Ry. would use a Municipal Railway tunnel for the first time, while Municipal lines would operate over the privately owned inside tracks down Market Street.

"And best of all," Roy adds, "the several-year dormant M line would resume service. This line is a special favorite with juicefans, due to its long right-of-way trackage."

PACIFIC ELECTRIC. Newport Beach line, running along the ocean shore south from Long Beach, a route on which passenger service was revived last May, gave its swan song to passenger operation last September 20th, we learn from Pvt. Ray Younghans, Med. Sec. SCU. 1967, Camp Haan, Calif. The passenger operation was not viewed with favor by the Army or Navy, and was discontinued at their suggestion.

PE lost at least 3 cars in recent wrecks, Ray writes. Center-door 616 burned up while on an "owl" run in September, and No. 5015, a PCC, was stripped following an accident, cause unknown, and R.P.O. car 1407, just recently out of the shops, left her trucks at high speed while wheeling through Compton, Calif., in a freak mishap.

* * *

OAKLAND. A new car line began operating on September 26th, according to Dick Jenevein, 566 Montclair Ave., Oakland 6, Calif., who was among those to take the first trip. It's the West Seventh Street and it has an interesting history.

Originally part of the Central Pacific Railway main stem, the Seventh Street line became Southern Pacific trackage and in 1911 was electrified. When Trans-Bay operations began in 1939, the Interurban Electric Ry. took over the line and two years later abandoned it. Although there seemed little hope that cars would ever run again on Seventh Street, it was only one year later that the idea of operating again was mentioned. By 1943, the transit situation was so acute that officials decided to restring the overhead wire, and begin operating again."

* * *

NORTHWEST. From Cpl. Ira L. Swett's monthly *Interurban News Letter* comes word of many interurban cars still operating in the Pacific Northwest as trailers on steam lines, as follows:

"The Pacific Great Eastern Ry., Skagit River electric line near Seattle, and numerous other lines are making use of cars that formerly rolled on the Oregon Electric, North Coast Lines, Inland Empire System and other interurbans, as trailers behind steam or electric power. The PGE pulls fine old Niles cars built for Oregon Electric from Vancouver to the historic frontier town of Quesnel. On this route, Niles sleepers and the once-famous parlor observation car *Sacajawea* roll through rugged mountain grades, high pasture land and hidden frontier towns that make the PGE a *must* for steam and juice fans alike."

Canadian Comments

QUEBEC RY. "Merrilees' photo of Quebec Ry., Light & Power Co. car No. 453 in Nov. issue, page 106, brings to mind an unusual feature of that yard," writes Arthur S. Ellis, 1203 Franklin Ave., Wilkinsburg, Pa. "All switches in the interurban yard are of the stub type, one plainly showing in the photo. Incidentally, those 400's are really big, seating 5 passengers across."

Arthur reports that during the summer season the QRL&P operates a city car with large roof sign reading "Car for Montmorency Falls and Ste. Anne de Beaupre." However, this car never leaves the city. It only takes passengers to the interurban terminal, where they can board a more comfortable vehicle for the long ride.

He asks: "According to the timetables, the CNR operates trains of its Murray Bay branch in and out of Quebec over the interurban line. Are these trains hauled by steam or electric power? It appears that they use the CNR station part of the year and the electric terminal at other times."

* * *

CORNWALL STREET RY. "There's a little trolley line in Cornwall, Ont., that deserves mention," declares L/Cpl. Allen Maitland, Kingston, Ont., Canada. He goes on to say that Cornwall, while only a small town, has 3 car routes. Pitt St., handled by a single Birney, is the main business thoroughfare. There are no turnouts for the entire length of its single-track route. The other two are the belt line and the 2nd Ave., run, the latter being the city's main line, running from the New York Central station for 3 miles. All equipment except the Birneys is second-hand, acquired from Jamestown, N. Y.; Wilkes-barre, Pa.; Kingston, N. Y., and other places.

* * *

ABANDONMENTS. "Merrilees's list of Canadian electric railway abandonments *(Nov. '43)* left out Pictou County Electric, of Nova Scotia, which folded up in 1931. By the way, Yarmouth Light & Power was

abandoned 1928, not 1938. This data comes from Don Shaw, Springfield, Mass.

"Another Canadian line, the Brandon Electric, was abandoned about 1931," writes Chas. V. Hess, 520th Q.M. Truck Regt., Camp Ellis, Ill. "The cars were sold as tourist cabins, while the shops were taken over by the Highway Commission as a vehicular repair garage. The line was never much of a financial success."

* * *

HAMILTON & DUNDAS. "While other Radials out of Hamilton may have had more vivid histories, none compared with the Hamilton & Dundas that I worked for," enthuses H. J Wichman, now a Grand Trunk Western lighting slinger.

He writes: "When I was 11 years old I took the job of office boy at the Dundas terminal. I recall many photos of the old Radial cars hanging on the walls there. If my memory serves me right, the first service on the line was by a steam engine and two cars. Just one block east of our depot was Ontario's finest skating rink. Hamilton people came by the carloads to use it—and when I say *carloads* I mean Radial carloads. It was a common sight to see 15 or 20 cars lined up ready to take the skaters back after the night session.

"Our Dundas station was used jointly by the TH&E and H&D Radial, one agent serving both companies. As I recall the staff, Wm. Lunn was agent, Mark Robinson the operator, Irene Maginty the chief clerk and yours truly official floor-sweeper and window-washer. Later Miss Flo Brant was engaged as car clerk. Aside from myself, Flo is the only one of the group still in railroad service.

"The old depot and car barn were torn down years ago, but the freight house has been modernized and now serves as a freight office for the steam road. After the H&D gave up, the TH&B installed a fine roadbed between their Hamilton yard and Dundas over the right-of-way. If any man of the old H&D crews happens to see this letter I wish he'd write me at 1439 Humphrey St., Birmingham, Mich."

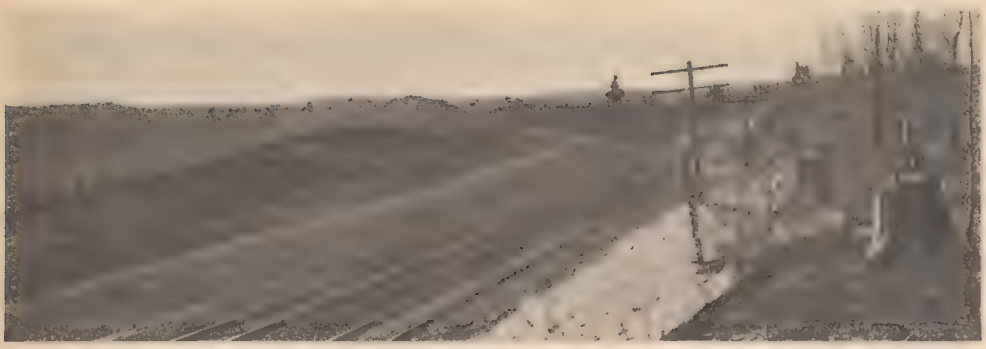
* * *

ARTICULATED CARS. We asked *(Nov. issue)* how many cities besides Cleveland, were now using articulated cars. This reply comes from Anthony Clegg, 3 McDonald, Ville St. Laurent, Que., Canada:

"Montreal Tramways have two such units, numbered 2500 and 2501, built by the Canadian Car & Foundry, Montreal, in 1928. Number 2500 sets 90 persons: 41 in the first part, 49 in the second part. It is propelled by four motors, there being no motors on the center truck. No. 2501 is similar except for the seating arrangements. Each car is 80 feet ½ inch long, 8 feet 4¾ inches wide and 11 feet 2½ inches from rail to trolley-base, with a weight of 58,800 pounds. However, due to their length, these cars are unable to operate the electric switches and so are used only during rush periods."

Regarding the query by Leonard Jeffries *(Nov. issue)* about the former Montreal double-end cars now operated with the stub trolleys, Anthony says this arrangement is due to the fact that these cars, 2001 to 2004 inclusive, when operated as double-enders were so built that they were unable to run unless one pole was down. Not wishing to reconstruct the electric arrangement in these cars, and as the long pole protruding from the front end was a hazard in the city, MTC replaced the trolleys with stubs.

REMEMBER when, unaware how close we were to the Pearl Harbor attack, good cars were consigned to the acetylene torch? This photo was taken by Stephen D. Maguire at Nashville, Tenn., in 1941



TODAY, Pennsylvania Railroad tracks at Bond siding give no hint of the cornfield meet that took the lives of freight engineer Fred Zimmerman, and head brakeman Hiram Witkop

PROFILE of the interlocked trains indicates the force of the collision. Testimony of survivors showed freight crew had forgotten the new train and a Noth Cadillac meet order

ALL that was left of conductor Fred Volkert's coach was this partially telescoped shell. He, along with passenger hogger J. B. Dart, a news agent and one passenger, was injured

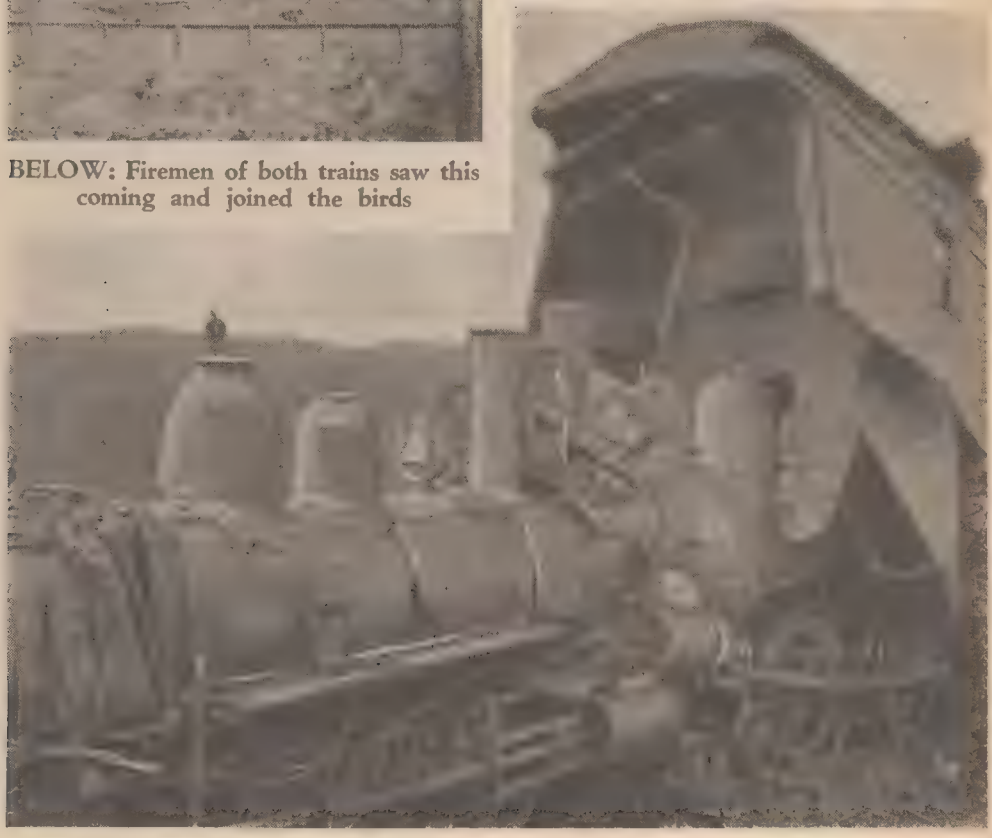
Michigan Train Christening

Old time photos by Will Anderson from O. C. Buskirk, Grand Rapids, Mich.

GRAND RAPIDS & INDIANA inaugurated a new passenger run between Traverse City and Cadillac, on Sunday, Sept. 22, 1901. Leaving the former terminal around 8 P. M., the flyer ran first through heavy fog and then through a heavier freight train speeding in the opposite direction, six miles out of Cadillac

ABOVE: Freight cars took their share of the shock

BELOW: Firemen of both trains saw this coming and joined the birds



High Wheeler

By E. S. DELLINGER
Ex-Trainman, Missouri Pacific and Frisco

A Story of Two Brothers; One Wanted Speed, the Other Didn't

SLANTING sunlight flooded Malpai Pass where the steel of the Pacific Eastern climbs over the Great Divide. Not a needle moved nor a twig swayed on the pinon and juniper which stretched away over the hills as far as the eye could see. Smoke belching out from the short stack of a great Mikado funneled straight up into a sky of deepest blue, every bark coming clear and distinct as George McAndrews Hale maneuvered her skillfully up the eastern slope leading fifty cars of dead freight.

Hale was now past middle age, tall and lean and wiry. Back in his youth, when he first went firing, the boys had dubbed him "High Pockets" and later had changed it to "High Wheeler." The latter nickname stuck. High Wheeler's hair, where it showed beneath his striped cap, was unmistakably gray, but this was offset by a reckless gleam in his clear steel eyes, a glint which not even a quarter-century of main-line discipline had subdued.

The big engine poked her stubby nose into the cut and shoved it on toward the gate of the passing track which hung like a saddle over the back of the divide. Engineer, fireman and head brakeman glanced at gold watches; the runner read again the green tissue sheet firmly fastened to the clip board hanging on the boiler head before him:

"1st Number 8 eng 3465 wait at Benson until 7:15 p. m. Midhill 7:30 p. m., Malpai 7:45 p. m. for extra 4608 west."

The engineer's watch said 6:57. He

snapped it into his overall pocket and laid a decisive hand on his throttle.

"Are we going up the main stem?" the brakeman queried.

"Not tonight, Shorty. We're headin' in."

"But we've got thirty-eight minutes to go down to Midhill—"

"By the time we get rid of these damned cars we won't have twenty-eight—and twenty-eight ain't time enough. When I start down Malpai Hill these days," he added firmly, "I want plenty of runnin' time and clearance."

The "damned cars" were a tank of water and a flat with a new motor car and several tons of track accessories billed to *D. Hale, section foreman, Malpai Pass.* Shorty Fleming winked knowingly at the fireman. Dave Hale was High Wheeler's twin brother. Shorty climbed around the left cab window and went over the running board so he could drop off the pilot step and sprint for the switch.

High Wheeler eased off his throttle and cut his speed to five miles an hour. Shorty bent the iron and caught the cab step of the engine crawling by. The bark of the exhaust deepened and its echoes bounded back from the surrounding hills. The long freight curved squealing into the siding.

Malpai Pass was not much of a town. Every mountain railroader knows its type. On the hogback which divided the waters flowing to the Gulf from those which tumbled down to the blue Pacific stood a dirty yellow station house, with living quarters overhead. The operators stayed there when snow piled deep in the pass. Beyond the station, where the steel turned sharply down toward the steep grades of the Malpai, were the yellow section house with a board fence around it, and eight old boxcars strung out on crossties along the trackside for the section hands to live in; and that night four red bunk cars were set in the spur track to house the gang of extra men come to help Dave Hale turn the steel on the upper hill. This was the railroad layout.

Beyond the station house was one short

street, beginning at the tracks and ending a little way to the south where the new highway skirted the foot of Baldy peak, rising up into the blue. Along this street stood a general store and two saloons, and a few cheap unpainted frame shacks, built for the loggers who cut timber for the lumber mills in a big town four miles to the east.

Then there was Pop's Place. Pop's Place was at the near end of this street. It was a rough board shack with a big red sign on the false front. Pop had been a Pacific Eastern freight conductor until he had overlooked an order and brought two of them together in a "cornfield meet." Now he sold soft drinks, hot coffee, sandwiches and fried chicken, and railroaded in memories which grew more vivid as the years glided by. Stuck here at mealtime for meets with trains moving up and down the grades, railroaders went into Pop's Place to eat his food and to live with him the days when the road was new.

AS THE BIG engine labored up to the crest and her nose tilted down toward the west, a boy came out of the section house and sat on the board fence which separated it from the threads of steel. The boy was seven years old. His feet, white and tender from much encasement in lace boots, were now bare; and his faded blue overalls were rolled halfway to his knees. High Wheeler watched him until the engine hid him from sight. The fireman waved, but the lad did not wave an answer. He sat stolidly atop the fence watching the cars drag by.

The passing track was on the north side of the main, the spur on the south. High Wheeler pulled his train through to the west end and stopped clear of the main-line switch. The brakeman cut off the flat and the water car, ran out on the main, shoved them into the spur, and coupled them into the four red bunk cars. Because this spur was on a one percent grade, Shorty set brakes on them and lined the derailing switch to keep them off the main line. Then he signalled his engine into the passing track, coupled her into his train and, climbing through the cab, told the eagle-eye he was going over to Pop's Place for a feed.

"Are you coming in, too?" he asked.

"No, I'm not," said High Wheeler. "I brought a lunch out of Carbondale."

The fireboy, a student, grinned expectantly. "Is this the joint where you get the fried chicken I've been hearing about?"

"This is it."

"Well, if the hoghead will look after her till I get back, I'd like to go with you, Shorty."

"Sure," Hale said. "I'll look after her. You run along, and you won't have to hurry. We've got plenty of time."

The fireman drew off his gauntlets and laid them in his seatbox. Shorty lighted his red lantern and set the white one on the fireman's platform. High Wheeler lifted the lid of his seat, brought out a chunk of clean cotton waste, thrust it into his hip pocket, and reached for his plug wrench and oilcan.

As the boys were turning toward the steps, the gruff voice of the section boss came up angrily from the ground below: "Why in hell didn't you guys set that water car in against them bunks?"

"We set 'em out the way they was made up," Shorty flung back.

"Well, that ain't the way I want 'em. You're gonna switch that flat out of there and put the water car in against the bunks so my men can get the water out of it."

The argument continued and waxed hot. Shorty declared he was not running a night local, and told the foreman that if he wanted the cars re-shuffled he could shuffle them himself or have the office send a special engine out from terminal to do the job the right way. The king snipe insisted strongly and profanely.

High Wheeler took no part in the argument, did not even cross the cab to listen in. He sat still in his seat with his nose pointed straight down the track and his hard gray eyes fixed on the purple peaks through which the railway wound on its gradual descent to the steeper grades beyond the town of Benson.

The foreman laid down an ultimatum:

"You cut off this engine and go in there and put that car where it belongs or, by Jezebel, I'll wire the Superintendent and ask for a message to make you do it!"

George McA. Hale did not take his eyes off the distant peaks, but knew by the sound of heavy feet crunching cinders that his brother had turned away and gone storming toward the office or his own abode.

When the steps died out, the brakeman turned into the deck and asked: "Shall we switch out that car? Or shall we let 'er stay the way she's put?"

"I'm not the conductor," Hale replied, "but if I was you I'd change it now and be done with it. If you don't, he'll make you do it before you leave here, and you'll have to explain why."

"All right, hogger, if you say so. But personally, I'd see the son of a biscuit in hell before I'd move a wheel."

The engineer was cool.

"Cut her off and let's go," he said. "If you two guys aim to eat your supper here, you'd better make it snappy. If this first Eight's on time, we'll go down to Midhill for the second one. Soon as you get rid of your cars, turn me into the passing track and beat it. I'll couple up the train and cut in the air, so we can be ready to high-tail it out of here as soon as they come."

SHORTY Fleming stamped wrathfully out of the deck and went down the steps. He liked High Wheeler. All brakemen did. But he did not like the twin brother—the two Hales had different temperaments.

Shorty cut off the engine, backed into the spur, picked up the two cars which he had previously set out, shuffled the flat to the main stem, threw the water car back into the spur, switched the flat ahead of it, and shoved them none too gently into the bunk cars where the extra section laborers were eating supper.

He should have set brakes immediately on both cars. As he went out with the engine, the brakeman should also have lined the derailing switch to throw them off the track, instead of into the main line, in the event they got away and started down the mountain. Rules required it. Shorty had been working long enough that he did not need to be told to do it. He had done it the first time, but now his head was hotter than any brakeman's head should be when he is switching cars. He had already braked and lined them once. This time, he did not think of it.

Damning Dave Hale and consigning him to a place where water would not quench his thirst, Shorty switched the engine back into the passing track and set the main-line switch. His work but partly done, he then went away to Pop's Place to eat fried chicken and listen to the tales of wild rides down the Malpai Mountain in the days before sissified officials took the thrill out of railroading with such tomfoolery as air-brakes and speed restrictions.

High Wheeler backed into his train. Before oiling around, he set the engine brake, left the cab, coupled the air-hose, and cut in the air. After he had oiled and inspected his Mike, he climbed into the cab and ate the lunch he had brought out of Carbondale.

The sun was going down. Number 8 was due in thirty minutes. Hale opened the firebox door, studied the fire, and remarked mentally that this student fireman he was breaking in was in a fair way to becoming an efficient coal-heaver. He closed the door and sauntered over to the left gangway to look out toward the section house, the bunk cars and the short crooked street beyond. The engineer did not notice that the white splotch of the derailer was not showing atop the spur track rail beside the clearance peg.

He became interested in other things. His brother's son, Alan Hale, had left the safety and security of the section house fence, had sneaked around the bunk cars out of his mother's sight, and was standing at the rear end of the water car where it coupled into the bunks. Time had been when he would have crossed the tracks and come running down to the cab to take primer lessons in the art of running

a locomotive. That was when High Wheeler was "Unkie" George, the idol of Alan's heart. That time was now past. After gazing at the big engine wistfully, observing the thin thread of smoke as it climbed lazily into the sky and the thinner one of white steam oozing up from the pop valve, the boy busied himself with other things.

High Wheeler watched the lad; could all but hear him talking to himself. The boy turned to the coupling and jerked the lever. The knuckle must have been left slack from the rebound in coupling, for High Wheeler remembered later that the lever lifted high. He played with it awhile, went in between the cars and tried to couple the air-hose; but coupling an air-hose is no job for a seven-year-old.

Alan gave that up, came out from between the cars and found the bleed-cock which drains the air out of the cylinder to release the brakes. Evidently this one did not work easily; but the boy must have cracked it a little, just enough to let the air seep out in a thin stream, not enough to bring an immediate release. He soon tired jerking it and went on down to the flat car.

The runner watched him, smiling without humor. He caught the bleed-cock and held it until the brake released. Then, with a final wave of his little hand to an imaginary eagle-eye on a mythical engine down the mountain, he climbed aboard the flat, seated himself on the motor car out of sight of home and mother, and went playing with the levers.

HIGH WHEELER returned to his own side of the cab, cocked his big feet up in the open window, lighted a cigar, and lost sight of the present in the cavalcade of the past. They weren't pleasant memories. It had been two long years since this grade leading down into the Great Basin, or even the sight of his little nephew sitting on the section house fence, had aroused the kind of memories a railroader likes to live with.

Until two years ago, George and Dave Hale had been almost inseparable. Together they had hunted the mountains and fished the streams. The living room of the section house and High Wheeler's bachelor quarters in Carbondale were still adorned with pot-bellied trout mounted on native pine, and the antlers of deer they had brought down in their hunts together. Until then, when High Wheeler had stopped in Malpai, he had headed always for the yellow section house to eat, if it were mealtime; if not, to sit in the shady porch or by the crackling cedar fire on the hearth, visiting until time for him to pull away.

It was high wheeling which had broken up this sociability and made the two brothers as strangers to each other. The engineer had always been a rather reckless runner. Of course, it was ticklish business roaring down Malpai Mountain on short time, with the brakes off and the stack chuttering and chuckling under a light throttle and a short cutoff; but George McAndrews Hale knew no fear. He was an artist with brake and throttle and he knew it.

Long after the present speed restrictions had gone into effect on the hill, long after printed rules on the timecard had required engineers to use four minutes to the mile on the upper twelve, and six to the mile on the eight below, High Wheeler had continued to run pretty much as he pleased. It was commonly believed that sometimes he even deliberately loafed along after rolling out of Malpai Pass, killing minutes on the upper hill so he could let her ramble on the lower end and still show running time between the open offices.

Dave Hale was aware of that. Dave, who loved his track as George loved his fast engines, remonstrated with him. There were long and heated arguments between them, the one insisting that track should be maintained for any speed, the other that an engineer should run with due respect to the grade and condition of the rails and roadbeds.

The trackman hotly predicted disaster, even threatened to report George's violation to the office before he turned an en-

gine off the mountain side, killing himself and his crew. But High Wheeler laughed in his face and continued to run as he had been doing. This thing went on for years. Breathless speed, paint-scorching meets, hairbreadth escapes as the engine took the curves; but always she remained on the iron and his brakes stopped him. Not once had George Hale met with accident on the Malpai.

The Pacific Eastern kept building bigger and better engines. At last, they brought out that leviathan of the rail, the Number 8000, by far the largest hog which had ever climbed their mountain grades. She had weight, she had power, she had speed. High Wheeler played with her, tried her out cautiously at first, then faster and faster, feeling out her paces, figuring how fast she would take the curves and stay right side up on the iron, and waiting a good excuse to roll her on his old racetrack, the upper Malpai.

THE CHANCE had come two years ago. He had started down the hill to a meet with Number 8 at Benson. A short distance out of Malpai something had happened to the train, a slight delay on the upper hill. It was nothing serious, just enough time lost to put him short at his meeting point.

With the big engine, George should have gone in at Midhill. He didn't. Often he had gone down with the lighter power on time as short and made it safely in, with no kinked iron to tell on him. He had gone that night, racing over the iron as he had always done with the brakes off and the throttle cracked, not dreaming of the havoc his heavy wheels were wreaking with his brother's track. No one except his own crew knew how fast he was running—and, of course, they did not tell—but his drivers wrote the record of his run, in a thousand feet of kinked rail on a stretch of mountain track which Dave Hale had spent hours in lining true as a die.

Dave knew when he did it. The king snipe was almost caught with his crew as the freight came rushing down the mountain iron, and he went berserk. Time and again he had reasoned and argued; time and again his remonstrances had gone unheeded. That night, without waiting for his temper to cool, he had gone straight into the office and reported to the Superintendent.

Of course, the officials investigated. They would have investigated anyhow, but they would have learned little or nothing if Dave had kept still. Now the trackmen, who had kept still because High Wheeler was the boss's brother, were willing to talk. They told how these wild runs had been going on for years. As a result, George Hale was pulled out of service.

For fifteen years he had been the pet of the division office. Dispatchers, who had not needed to be told what he was doing, had seen to it that he caught the fast ones when they came within his range, because they could depend upon his skill to put them through. But this did not save him now. A thousand feet of kinked rail could not be explained away. The Superintendent took him off his run for six whole months.

If they had known all that happened that night when he filled his hide with hard liquor and went up to the section house, the Pacific Eastern would have been short a skilful runner; George Hale's name would not longer have stood on the payroll. But they did not know, for the brothers settled their personal difference out of court.

Not even Dave Hale's wife knew definitely. The section foreman had come home with a bloody fist and a broken nose, while the engineer had called on his dentist. When the whisky and resentment had gone and the cool light of reason had returned, High Wheeler knew that the greater fault was his. He had returned to the pass and had tried to patch up this brotherly quarrel, as other scraps had been patched up; but things had been done and said which mere words could not mend.

From that night on, the brothers had not fished and hunted together; they had exchanged messages only through the medium of others; and little Alan Hale no

longer went down to the passing track and climbed into the cab when "Unkie" George put the big locomotives into the hole at Malpai Pass to await the varnish going by.

THE ENGINEER, aroused from his reveries, slipped into the deck and laid nine scoops of coal on the glowing fire. First Number 8 was almost due now. He stepped to the left gangway and peered out. She was not in sight. The block in the west was clear and there was no smudge of smoke on the hill nor sound of the hammering exhaust echoing among the mountain peaks.

His eyes shifted from the distant hills to the red bunk cars with the water car and the flat ahead. On the flat, hunkered down on the motor car, was the lonely figure of the little boy. The runner clamped his teeth hard and started down the steps. Then, remembering the last words his brother had spoken to him, he returned to his cab seat to await the arrival of the varnished cars.

The sun went down in a ball of fire. Twilight stole softly over the mountains. The full moon crawling up from the desert cast long gray shadows from the rounded bush of juniper and pine. Outlines of rounded hills and jutting crags to the west dimmed into ghostly shadows.

The dispatcher had missed his guess on Number 8. Her time slipped by. High Wheeler kept watch on the order board at the telegraph office, but there were no new orders for him. At 8:15 the passenger train came up the hill with green eyes glowing and green rags fluttering. Her engineer whistled signals; the freight runner answered.

Down on the flat car, Dave Hale's boy, partly awakened by the noise, watched her go. As the last car clacked through the switch frog and the red markers disappeared over the hogback, a peculiar sound came up from beneath the water car. But the boy had not been trained to read and interpret it—the sound of brake-shoes loosening as the air, whose release his hand had started an hour ago, went out from behind the piston and turned the lever loose. Slowly the knuckle, which Alan had opened when he played with the lever, moved and the cars parted. Slowly their wheels began to turn, slowly at first, a barely perceptible movement which, had he been wide awake, would soon have become apparent to him.

But Alan was not wide awake; he had sunk back into slumber. He stirred uneasily when the wheels split the switch and rolled brakeless out into the main line, turning faster and faster; but he did not open his eyes.

Up in Pop's Place, the fireman and the brakeman had finished eating chicken dinner. The bones had been picked clean before the varnished cars went through. They did not leave then, because there was not time left now to go down the hill for second Number 8; and Pop was in the midst of a stirring narrative of the time he had ridden the grades of Malpai Mountain on a train with no brakes on it.

In the section house, Dave Hale finished writing up his day's reports. He sealed them in their envelope and laid them on the table ready to take to the office after he had eaten. Supper was now ready. His wife called to him, then stuck her head out of the kitchen door.

"Alan! Oh, Alan!"

The little boy did not answer. Turning to her husband, the woman said: "I'll bet he's gone up there to that engine. I saw him watchin' it across the tracks when the train first pulled in."

Alan's father came up out of the chair. His face was set; his jaws were squared. He strode to the door and out across the tracks where the Number 4608 stood at the head of her train, smoke threading up from her short stack into the flood of moonlight, the white feather of steam rising just behind. He swung himself to the second step and thrust his head above the steel deck.

"Is that boy of mine here?" he asked.

IT WAS the first time in two years he had spoken to the engineer. High Wheeler sauntered across the deck and

glanced whimsically down into his upturned face.

"No, he ain't here, Dave. He's over there by the—"

The engineer hushed. Instinctively his eye had gone to the west end of the spur where the water car and the flat had been. They were not there now, and the signal block was red, indicating that rolling wheels were on the grade below. He swallowed hard, his eyes glowing fiercely.

"My God! Those cars are gone!"

"What cars?" The king snipe barked his query as if he did not already know.

"That water car and the flat ahead of it. Alan was on the flat a few minutes before that passenger train came by."

Dave started toward the west switch running, but his brother shouted:

"Come back here, Dave! Come back here and cut off this engine."

The foreman faltered, whirled, came running back. He did not stop at the gangway to ask needless questions. He darted to the rear and with deft movements cut out the air, broke the train line, lifted the coupling lever, and signalled away. Three fast leaps brought him to the cab steps. The engine was moving then. He stopped on the steps, poised and ready to leap and sprint for the switch; but High Wheeler called down to him:

"Let the switch go! We've not got time to open it. We'll split it and go on."

He dropped the air reverse below center and opened the throttle. The big engine shot forward. George looked up at the block signal racing toward him. Its light was still red.

"They've not been gone long," he shouted. "They're still in the first block."

"They've been gone too long!" moaned the father. "Unless we overtake 'em before they pass through Benson, they'll turn over on them curves on the hill below."

High Wheeler knew that was one great danger. The twelve miles from Malpai down to Benson was a gradual descent with curves which were good for almost any speed a flatcar could make. Beyond Benson they went into the winding canyon. There the track wound along the canyon wall, dropping a hundred five feet to the mile on curves so sharp the engineer could not see five cars behind his tank. Those curves might stand for *forty* miles an hour—for *eighty,* never!

There was another danger far more imminent than this. The wild runner glanced at the second order on his clip. It read:

"2nd Number 8, eng 3482 wait at Benson until 8:30, Midhill 8:45 for Exa 4608 west."

It was now 8:45. Number 8 might already be through Benson, might even be at Midhill. She might meet the cars head-on before they reached the curves on Benson Hill.

In silence High Wheeler handed the clip to his brother with the tissue folded back from over it. The section foreman's grim face set more tightly; the lines about his mouth deepened.

"They'll hit," he muttered. "They'll hit before we overtake 'em."

High Wheeler feared his words were prophecy, but he voiced the one hope which he held.

"Second Eight may be late on her order. The first one was thirty minutes off. If this one's only as far behind—"

He was dragging the whistle cord now, whistling on every curve, whistling from the force of habit formed in the days when he had raced this hill for fun, for the thrill of speed, and the love of a fast ride. His side rods were flashes in the moonlight. The engine's nose was weaving gently as it pointed the way down the winding trail. Both men kept watching as the big hog rolled faster and faster.

AT LENGTH, through the bright moonlight, they saw the object of their chase long before their headlight picked it up. They saw it far ahead of them—two cars careening on the curve with little Alan clinging for life to the motor car!

Dave stood by his brother's knee and muttered: "Faster, man! Go faster!"

"I'm doing eighty now," the engineer replied.

"Then step her up to ninety, to a hundred, or a hundred ten. I know this track. I've bossed the lining of every joint, the driving of every spike. If any track in the world will stand the speed, this stretch down Malpai Hill will stand it."

The section boss went out through the cab window where he could make the coupling.

"Be careful!" the engineer admonished.

There was no answer. Dave Hale crept along the cab rim, reached the running board, the steps leading down, the pilot platform. The milepost at Benson had flicked by. High Wheeler had whistled long and loud. The blocks at the east switch stood at forty-five till the car went through them, then fell to red. A caution block—Number 8 was coming!

How far away, the runner did not know. He knew only that she was not between the switches. He went through the red blocks and down past the telegraph office. The operator was there as the cars and engine hurtled by, and dashed inside to report that something had gone west at about a hundred miles an hour.

It may have been a hundred. George did not know; he was not counting poles. He knew only that he was running faster than he had ever ridden an engine before in all his life.

He was leaning far out of his cab window, feeling the throttle, letting air out of his brake valve as he closed the gap between him and the tank car just beyond his pilot nose. Before the drumming of wheels by the station walls had ceased to echo in his ears, he felt a slight jar. He watched the pilot. Up came the section foreman swinging a stop sign. High Wheeler set his air. The speed came down. It dropped to eighty, to seventy.

That's what he reckoned he was doing when he went through the red west headblock, fighting with all the skill gained in twenty years of fast running to cut his speed before he crashed headon into the train coming up to meet him.

And she *was* coming, that 2nd Number 8. She might be a half-mile away; she might be on the next curve. He took the curve. No headlight there. A thousand feet below him on the floor of the canyon, a tiny thread of water trickled among black Malpai rocks. The mighty drivers seemed to lift, then settle back and go racing on.

DAVE HALE had now left the pilot going to his little son. He stumbled along the running board holding to the grab-iron on the tank. He paused when the cars careened, waited breathlessly for the wheels to leave the iron and the cars to plunge into the canyon where other cars had gone before air-brakes and speed restrictions had taken away the thrills.

High Wheeler worked with air and sand. Tomorrow there would be driver tires to set, more rails to straighten out, more questions he must answer. But tomorrow was another day.

Fifty miles an hour, forty-thirty-five. He rode smoothly over the second curve at twenty miles an hour, then ten, and out from the cut below came to the dazzling gleam of an engine headlight, and the sound of an exhaust as the startled engineer reversed and went into backward motion without waiting for a signal.

Explanations soon were made. High Wheeler backed ahead of the passenger train to Malpai Pass. The foreman hurried to his tool house for tools to spike the switches which the cars and engine had split. The passenger train went by.

As the crew broke up and returned to their stations, Dave Hale said, with an arm around his son's shoulders: "Fishin' season opens Monday, don't it, George?"

"That's right, Dave. How about tryin' the Blue Water Lake?"

"Sounds good to me—Sunday morning?"

"Okay, Dave, I'll be waitin' for you with grease and a fryin' pan."

The engineer climbed to his throne and cracked his throttle. He whistled a highball which echoed back from the distant hills. Three lanterns swung their answer, and the freight went drifting down the main, picking up speed with every turn of the wheels.

Train Dispatchers' Tools

By PETER JOSSERAND

Dispatcher, Western Pacific

Scene from a Reading Co. tower

THE TRAIN dispatchers' office on any railroad is not very accessible. To enter it you must pass under the scrutiny of the chief dispatcher, with his permission. The purpose of your visit must be more than curiosity or a desire to kill time. And if you do manage to slip past the chief, you still won't be allowed to stay there long unless you have come on essential business.

Even in the pre-war days when railfans were sometimes given the right to roam around shops and yards at will, snapping pictures, the dispatchers' room was kept firmly shut against the camera boys and girls as well as against all other outsiders. Non-railroaders are practically never admitted to the place where DS is busy carrying on. In fact, many a "rail" has worked for years with dispatchers or under their supervision without so much as a peek inside.

After all this build-up you might think our private enclosure is a mild sort of mysterious inner sanctum, but such is far from the truth. The furnishings are quite plain and ordinary. In a few cases you'll find a Centralized Traffic Control machine, but so few that I will not deal with this form of operation in the present article.

The average dispatchers' office contains a desk, a chair or two, a clock and perhaps a locker. The locker, if any, is a luxury of recent times. The old established custom in some places was to throw your hat and coat on the floor before taking the transfer. On the desk you see the telegraph key and sounder; and if the district is worked by telephone, there is also a selective ringing device and a loud-

LOUDSPEAKER is a boon to present-day dispatcher, eliminating uncomfortable head-set. Here's Tom Hardy of the Norfolk & Western busy Bluefield, W. Va., yard, where he handles as many as 125 trains a day

speaker, provided the fellows are lucky enough to get one instead of having to wear a head-set.

About the only other visible objects are the train sheet, the train-order book and a file of messages relating directly to movements over that district. The first time I entered a dispatchers' office, years ago, I was amazed to discover that so much noise could emanate from a spot so bare.

How the devil does a man keep track of his trains? Well, let's have a look at the train sheet. Down the center of this sheet are the names of stations and other data, varying on different roads, such as the mileage between depots, office calls and the capacities of sidings. Some train sheets do not show blind sidings, only the telegraph offices. On one side of this column are the trains moving in one direction; on the other side, opposing trains. Where "eastward superiority" exists, eastward trains are usually listed on the right side of the sheet, or northward trains if trains run north and south.

On the WP train sheet westward trains are superior to those of the same class in the opposite direction. Therefore, the sheet was designed to help new dispatchers accustomed to having their superior trains on the right side of the sheet. "Red" Allen, Western Pacific chief dispatcher, designed it.

First, on either side, come the passenger trains; then the freight movements. The information carried at the top of each column as to crew, time on duty, etc., varies slightly with each road. Most companies require the names of the entire crew instead of only the conductor and engineer plus the number of brakemen.

When a train leaves a terminal, the time of departure is recorded, together with the amount of equipment handled—that is, the number of cars for a passenger train or the loads, empties and tonnage for a freight. Roads generally figure their ton-

MAKING MORE MISERY for the dispatcher. N&W retarder operator pinches down a cut of cars as they drift into a classification yard at Roanoke, Va.

nage in units of 2000 pounds, but some use 1000 pounds, called an M. In other words, a train handling 3500 tons would have the equivalent of 7000 Ms.

As each train is reported by the offices it passes, DS records the time of arrival and departure, or the time it goes by—if ever he is fortunate enough to get one by without stopping it for orders—and shows such changes in tonnage as may be required. On the train sheet it is customary to put a minus sign where a setout is to be made, together with the number of loads and empties, or a plus sign if there is a pickup.

Usually the word "eat" is written opposite the name of the station where the crew plans to stop for a meal. This serves a double purpose. It reminds the DS of the additional delay while figuring the running time and it is mute evidence to any brass collar who examines the train sheet afterward that this delay at least cannot be blamed on the dispatcher.

THE COLUMN for westward trains is started from the bottom of the sheet, and eastward trains from the top. After you have become accustomed to looking at a train sheet with one eye focused on each side, only a glance is necessary to show where two trains have met. For instance, *No. 39* met *No. 12* at Portola and *No. 40* at Sierra; or *Extra 254 West* met *First 78* at Keddie and let *First* and *Second 11* by at Paxton.

Our train sheet shows part of an actual day's business. Bear in mind that some of the trains met by *Extra 254 West* do not appear on this sheet, since a train is carried through to its terminal on the sheet on which it starts. For example,

Third 62 left Oroville yard at 10:45 p.m. March 4th, arriving at Portola 9:50 a.m., March 5th, yet the entire movement is carried on the sheet for the fourth. This causes the DS to juggle two sheets instead of one until all trains on the previous days' listing have arrived at their terminals.

Some spot on the sheet, either on the face or the back, usually is provided for entering a record of delays to trains, as reported by the conductor at the end of his run. The first number on the delays shown is the station number, the time being shown like this: 1′20″, or one hour and twenty minutes. P/U, pick up; S/O set out, etc. To the uninformed non-railroader, the delay for "air" might indicate a suffocating condition of some sort. This, of course, represents the time required by carmen to make the terminal test of air-brakes in the train after the engine is coupled onto the train and the train line charged with air.

Work trains are carried separately from other trains. No record of their movement within their limits is recorded. On the sheet you find space for recording the weather; the names of deadhead crews, where they were deadheaded from and to, and on what train; the consists of passenger trains, livestock movements, etc.

Each dispatcher is required to sign the train sheet in the space provided, stating the hours he is on duty. The day of the week is shown, as well as the month and date, since these facts affect train movement. Some trains do not operate daily but, for example, every Monday, Wednesday and Friday. Some time ago *Railroad Magazine* published an item about an English train that runs only once a year.

Having discovered no place on the sheet for recording the orders and clearances issued to the said trains, you might wonder how such a record is kept. We turn now to the train-order book. All roads do not have the same kind of book. Some employ printed forms in which the orders are written. Others use plain ruled pages.

The SDE, SDW or SDE&W, showing the position of the train-order signal may or may not be required, according to the rules of the individual road. Some companies require that the "sine" of the operator receiving the "19" order be recorded, together with the time repeated and completed, R&C. On the "31" order no complete is given until the signature of the person to whom it is addressed is received. The R indicates the time repeated and the C the time it is made complete to the person who has signed it.

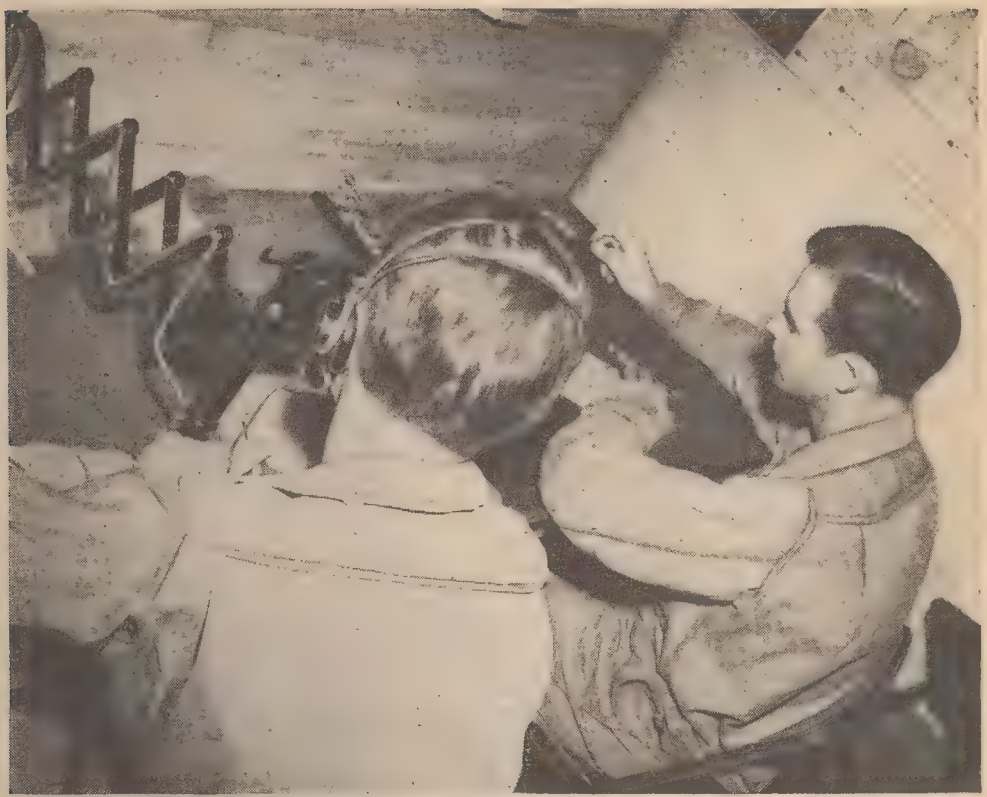
Each number, address and word of each order is underscored as it is repeated to the dispatcher. This, to the unaccustomed eye, does not enhance the order's beauty, if any. But let something go amiss, such as a "bulled" order, and the DS is plenty thankful for the scratching as the Interstate Commerce Commission investigator peers over his glasses while the Superintendent inquires if the order was properly repeated, for it is the dispatcher's only record that he is in the clear. Failure to underline one word may cost a man his job.

The clearance card record shows the "station call," the train cleared, the numbers of the orders the train is to receive and the time the DS makes the clearance okay.

No discussion of the clock is necessary. This useful article differs from other clocks only in that it has the correct time. Everyone is familiar with the telegraph key and sounder; and approximately all that I know about the selective ringing is that you twist a button one-quarter turn and then let it go. This results in ringing the desired station and no other. When the phone fails for some reason and you have to fall back on Morse, you're in for one hell of a time. The telephone is much faster than Morse, even if you have first-class operators to work with.

THAT completes the visible tools of the the dispatcher. Are there such things as invisible tools?

Let's say a dispatcher is about to start a train out of a terminal. He must first decide whether to run it on a schedule, if



ARMY MEN learn train dispatching. A dummy setup is connected by wire with the yard's main dispatcher's office so the soldiers can listen in on the real thing. (Left to right) Corp. L. C. Jarvis of New York City and Pvt. John Fryer of Bellevue, O., in a railway operating battalion at Fort Sam Houston, Texas

one is available, or whether it is better to operate it as an "extra"; if the latter, then what kind of extra it will be. Next he must provide some means for the said train meeting all opposing trains on the railroad and see that it does not delay faster movements that may start behind it; also, that any slower train ahead doesn't delay this one.

As for first-class trains, ours will be governed by timetable schedule if the varnished cars are on time; otherwise, by a "run late" order such as No. 103; or the first-class train may be put on waits.

There are many forms of orders which the DS may use to move opposing trains to a meeting point. One is the "meet" order. Another the "short right-of-track" order. Still another is the right-of-track order with the train, upon which right is conferred, waiting for the opposing train. A regular train may be put on "waits" for an opposing extra to which it is superior. Or a train may be told to take siding and not leave a station unless the opposing train has arrived. The order may be so worded that the engine has no authority to use the main track until after a given time, or until a certain train has arrived, etc.

The importance of the movement or the work the train is to do will determine whether it should be a "work" extra, a plain extra, or one of the polished variety, commonly known as the Form G-3 extra, which may be given right over all other trains or all others except first-class, etc., when inferior trains in the same direction would then have to clear it the same as a first-class train.

The "where" of the meeting points the DS determines by figuring the running time of the trains, plus any delay they may get which he is able to anticipate. With four to eight trains moving in each direction against each other, it's rather like the string of dominoes you used to stand on end when you were a kid. If the first meet is bad, it is the equivalent of tipping over the first domino; and every other meet you have out is affected. When the DS isn't fast enough to catch that first domino before it touches the second, every train on the railroad is going to get knocked down on their meets as a result of the first bad meet—perhaps due to a hotbox.

So we see that the visible portion of the dispatcher's work is only incidental to the real job, tools for which are fashioned from the rules and knowledge of the human element, as well as from the physical handicaps of his territory, plus experience—all of which may be summed up as "good judgment."

Only experience will teach a dispatcher the proper tool to use under given circumstances; and such a procedure is often accompanied by severe criticism. Take the case of a DS who had a train about to tie up on sixteen hours and was instructed by the chief dispatcher to give them the railroad. He did. He gave them right over everything from where they were into the terminal, including a passenger train. Had this train made the terminal within their sixteen hours—which the DS had every right to believe they would do—the passenger train would have been delayed only ten minutes, a delay justifiable under the circumstances. However, the said freight train had to stop and rebrass a car of perishables. As a result, it headed into a blind siding and tied up where the dispatcher had no way of annulling the orders. The varnished cars grew flat wheels for hours while a crew was being rounded up and sent via taxi to relieve the crew.

Had the DS given opposing trains an order to wait at the terminal until the expiration of the crew's sixteen hours, they would have had the same chance of making the terminal, without the resulting complications; for at the time the crew tied up, other trains would have been released.

Just because you can't see them, don't think the dispatcher doesn't have a chest full of mental gadgets, all of which he uses to pry and twist and hammer and squeeze his trains over the railroad.

Copy Three

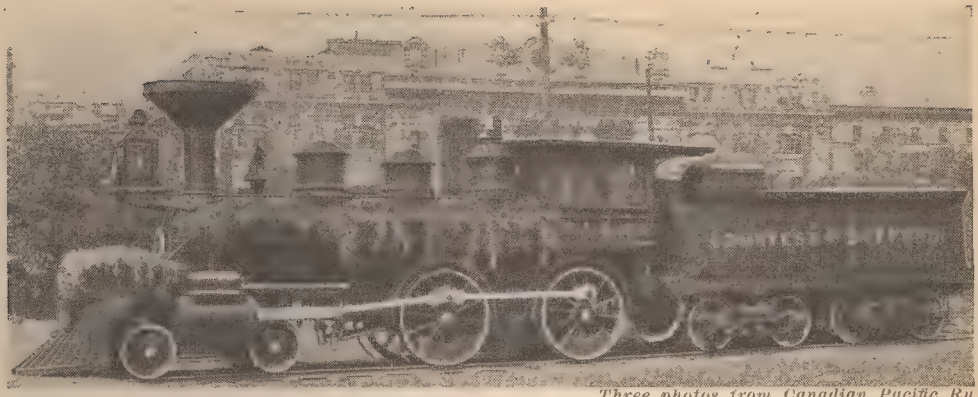
BACK to the click of the sounders.
Back to the lure of the keys.
One after another we're coming
All the old Used To Be's
From offices in the cities
From farms in the middle west,
From mountain and plain and seaside
Once more we will give our best.

Forgotten the cruel meaning
Of all those years between,
With human skill at its highest
Pitted against machine;
Teletype in Commercial,
Phones on the railroads, too,
Morse was dead as a dodo,
Any raw ham would do.

But now that the wheels are rolling
Over the gleaming rails
Carrying war's grim cargo
Destined for far-off trails,
Back to the roads we rally,
Old-time Knights of the Key,
Ready to do our utmost
In this emergency.

Only a renaissance fleeting
Of the glory of other days,
Long are the hours in harness
Scanty the meed of praise,
But, we're on hand when needed,
Can't risk a failing phone
While our boys are lacking munitions,
So Morse comes into its own!

—*S. Moore Walker*



Three photos from Canadian Pacific Ry.

The Countess Travels Again

By A. J. DALRYMPLE

TODAY the first locomotive to run on Canadian Pacific rails in western Canada still rests on a little plot of grass near the CPR station in Winnipeg, her pilot and boiler oddly decorated with flowerboxes. She survived years of service in the Rockies, attempts to put her on the rip track, and finally, the scrap-metal enthusiasts. With luck, the old girl seems destined to stand on her rails as long as men are interested in railway history.

The *Countess of Dufferin* arrived at St. Boniface, opposite the city of Winnipeg, in 1877. That wasn't her name then, she was simply Number 1 for the newly organized CPR. Conductor Joseph Whitehead, who built the company's line from St. Boniface to Pembina, bought her in the States for the modest sum of $6800. She had been Number 56 for the Northern Pacific; a bronze plate on the smokebox reads "Baldwin Locomotive Works, 1872; M. Baird & Co.; No. 2660; Phila."

On October eighth or ninth—a two-day celebration in honor of the One-Spot's arrival made oldtimers a little uncertain of the exact date—the river boat *Selkirk,* pushing a barge, with the new engine aboard, reached St. Boniface. The *Countess* had been shipped from Fargo, N.D., on a line owned by Jim Hill. Trappers, traders, construction gangs, and the assorted citizenry of the growing settlement on the Red River turned out to see the new locomotive unloaded.

There were forts along the Red River then, and as the stern-wheeler had chuffed northward, guns boomed out a welcome. Charles N. Bell, later founder of the Winnipeg Stock Exchange, passed the little engine through the customs. The shore point where the barge landed, now covered with city buildings, was midway between the present-day location of the terminals of Canada's two big railways, the Pacific and the National.

Several years before the little ten-wheeled wood-burner made her first appearance in Winnipeg, Canada received the Earl of Dufferin as Governor General. The Earl's interest in the country led him to make a trip with his wife through the western section of the country.

They traveled over the railways and bounced about in Red River carts, to the satisfaction of the pioneers on Canada's plains, and their popularity led to naming the new locomotive the *Countess of Dufferin.*

The first jobs given to No. 1 were on

CPR construction westward. Later she operated on the prairies making regular freight and passenger runs, and went into services on the route through the Rocky Mountain region.

Some old-timers may remember the first crew of the *Countess*. They were: Engineer Jack Cardell, Fireman Charles Swinbank, Conductor James Doig, and Brakeman Robert Kirkup and William Stamp.

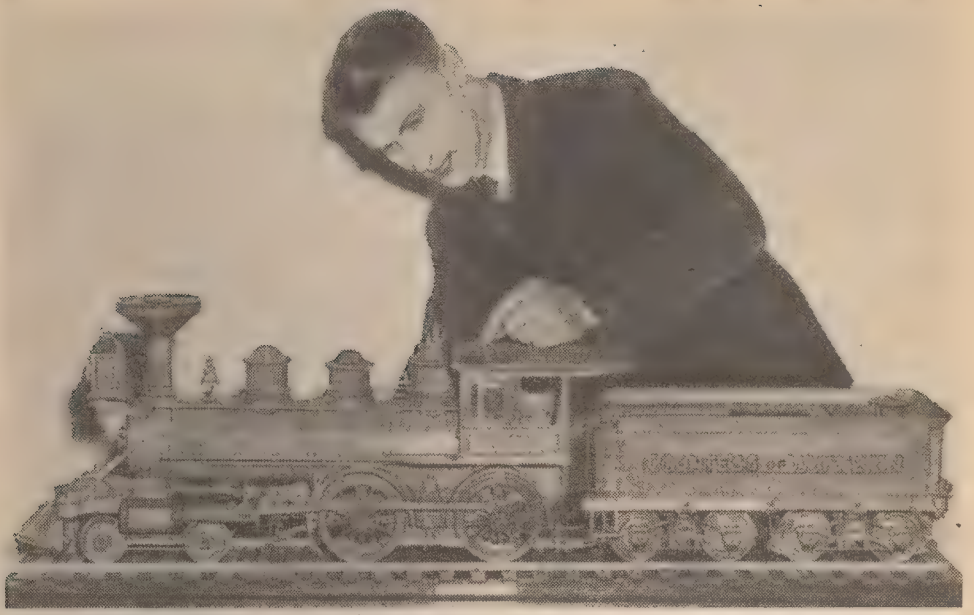
The writer has talked with some of the men who fired old No. 1, and their reminiscences lead off with tales of the punishing cold they endured. The cab of the engine looks flimsy in comparison with a modern enclosed one; the gangways were wide open, and there was little protection from the weather. Loading wood at way stations was the worst of all. The firemen dreaded the job of stacking the tender in wintertime.

When the *Countess* had done yeoman service for the CPR on mountain runs, she was sold to the Columbia River Lumber Company at Golden, B.C. The scrap heap might have been the next stop for the old girl, if the late A. G. Parsons of Golden hadn't urged that she be saved and returned to Winnipeg as a monument.

They rescued the *Countess of Dufferin* from the rip track and brought her back to the city where she first landed, in April 1910. Special tracks were laid across Higgins Avenue in front of the CPR station, and the little locomotive moved to a spot in Sir William Whyte Park.

Automobiles and the present war almost brought the career of the One-spot to an end, but enough railroad-minded citizens of Winnipeg rallied around to keep the old engine alive. With the great increase in traffic in the city, it was decided that the grounds where the *Countess* stood was needed for a new parking lot.

People with little understanding of art.



WOODEN MODEL of the ***Countess of Dufferin*** with over five thousand parts was built by CPR Fireman Thomas L. Scott. Below: The ***Countess*** was moved to Whyte Park in 1910

history, or the corrosion of metal suggested that the locomotive should be cut up for scrap, but careful inspection proved to everybody's satisfaction that wind and weather had reduced No. 1's structure to little more than a shell, and the metal they could salvage would be worthless.

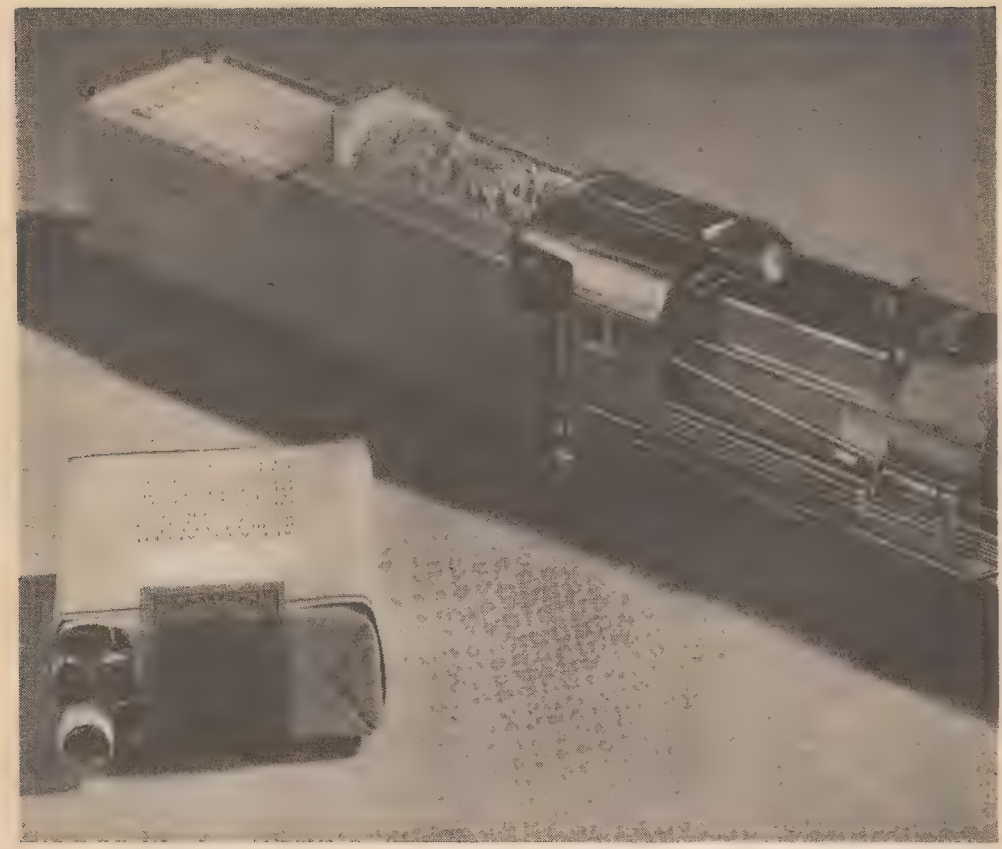
A compromise was finally reached, which prevented destruction of the *Countess*. She was hauled in September, 1942, in the dead of night so as not to disrupt traffic, across the street to a spot just outside the main entrance to the Canadian Pacific station. The men handled the job did not turn her wheels—they bundled her in heavy, burlap-bound timbers, and eased her on greased rails to a new location.

Camera fans still take the *Countess'* picture, and British Empire boys in the armed services stand and gaze at the old girl, when they land at the Winnipeg station. She has seen a good part of Dominion history since she first arrived there.

Coming next month:

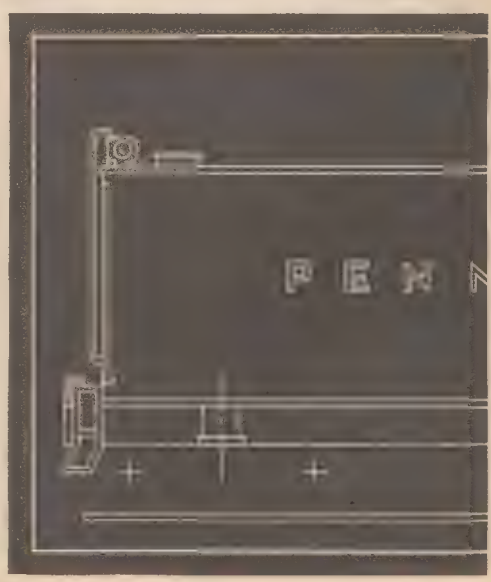
"Malleys"

The Origin and Development of Articulated Power



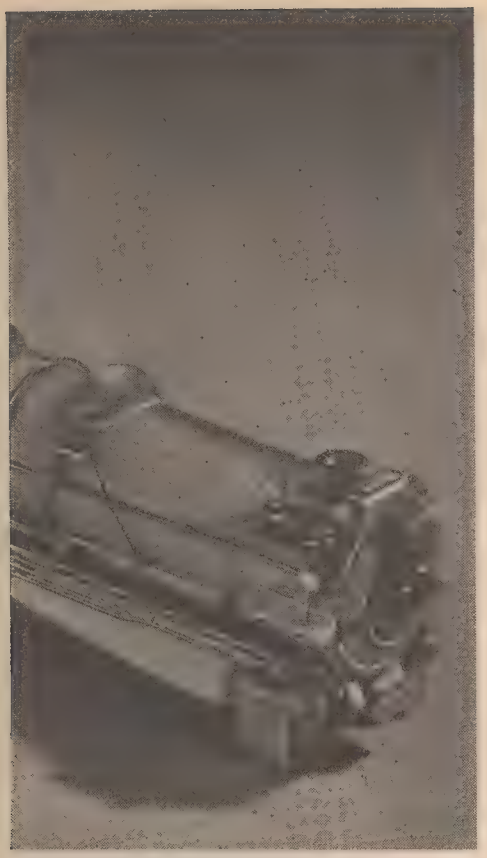
Model Railroading

NOW that there aren't enough weeds left in last year's Victory garden to make a Pennsylvania Railroad salad bowl, how about those back-logged model locomotive orders? More than one carrier has taken to rolling its own since Pearl Harbor and if you're a master mechanic worthy of the name you aren't going to sit serenely on your compound rest while the advance section of the *Congestional Limited* stands idle for want of a heavy Pacific.



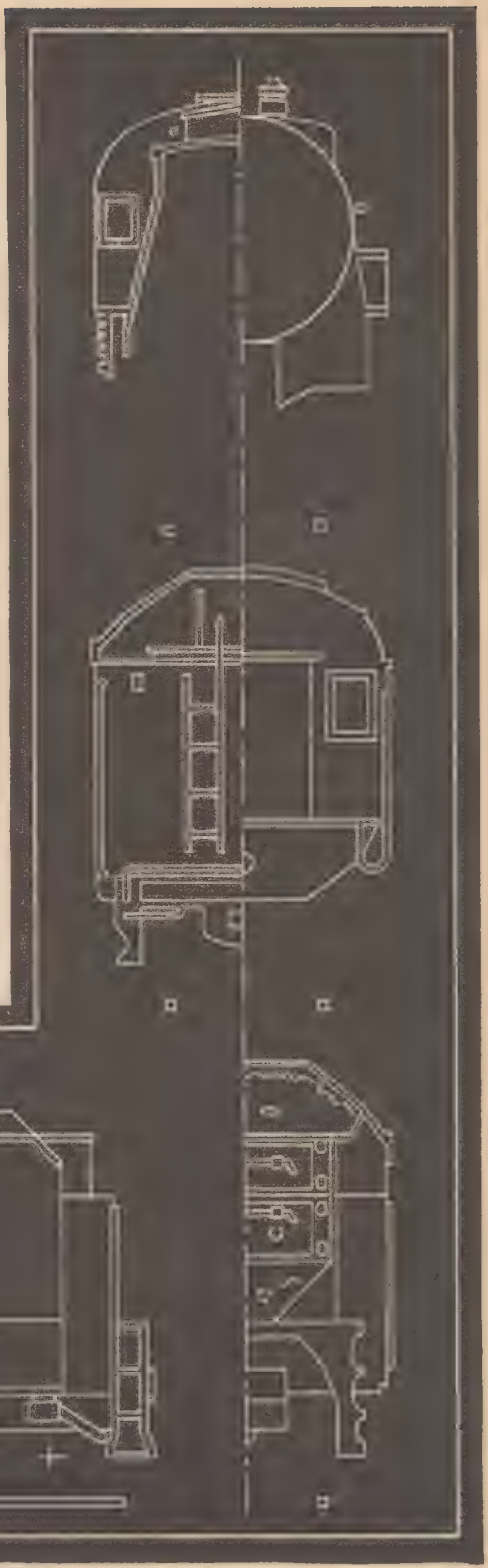
With this thought in mind, Railroad Magazine's backshop presents its ersatz locomotive of the month—the PRR K-5.

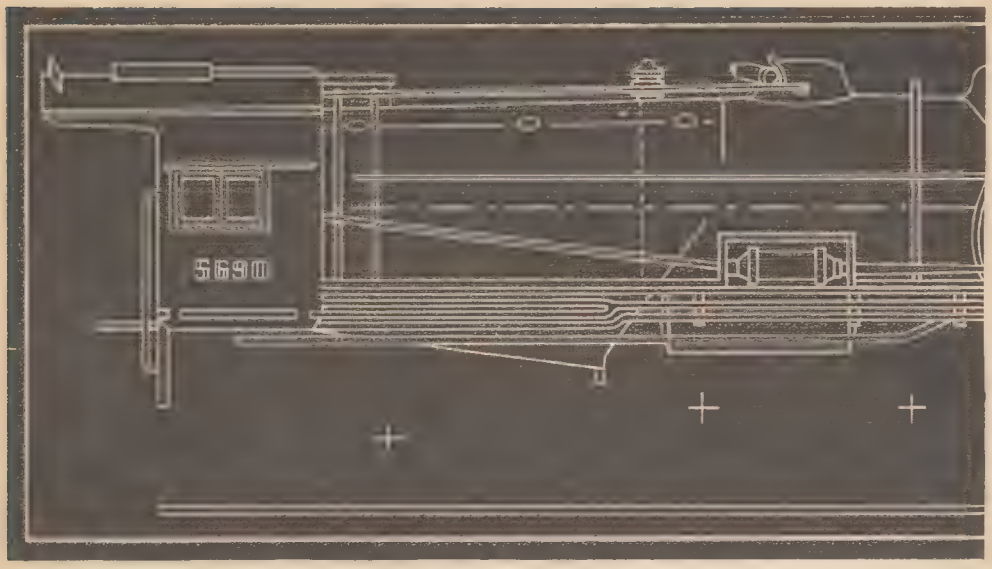
Back in 1928 the "Standard Railroad of the World" was ready to concede the need for a larger and more powerful



Ersatz Pacific

By THE NUT-SPLITTER





passenger engine than its famous K-4s. Yet the excellent performance of this big Pacific and its flexibility were such that motive-power officials were reluctant to change the wheel arrangement.

As a result, there appeared on the drafting board a super 4-6-2 designated Class K-5. This machine, incorporating the boiler of the I-1s Decapod and the cylinders of the M-1a Mountain type, weighed five tons more than its predecessor and by means of a forty-five pound boost in operating boiler pressure, developed 56,750 pounds' starting tractive effort, as against the K-4's 44,460 pounds.

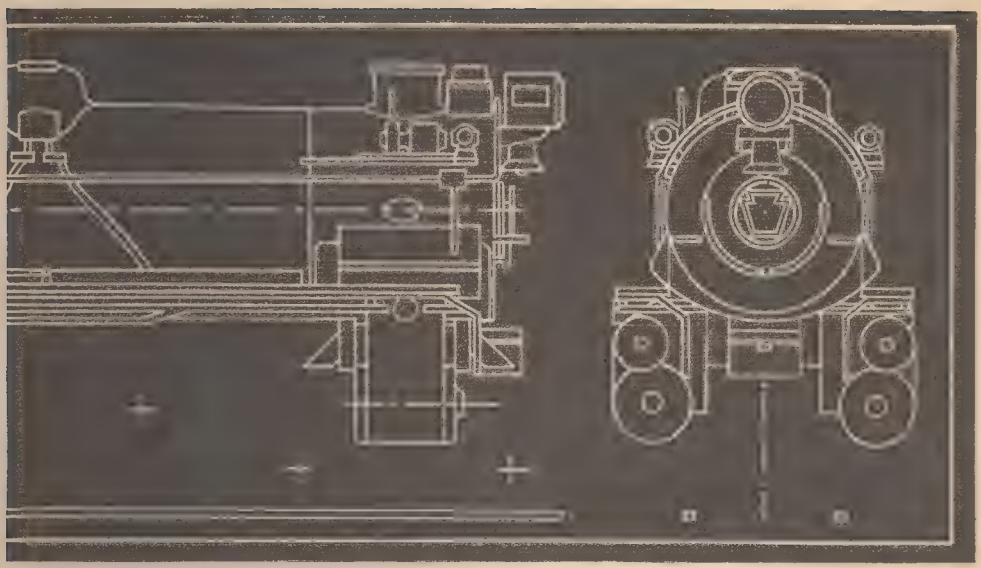
Actually only two K-5s ever left the erecting shops. Numbered 5698 and 5699, they were constructed by Juniata and Baldwin, respectively, and went into experimental service in 1929. Assigned to various portions of the system, they delivered all the power and speed expected of them, but the overabundance of locomotives available during the depression years, together with their high cost, per unit of horsepower developed, discouraged duplication.

Today, after numerous tests, including an unsuccessful application of Caprotti valve-gear to the 5699, the two big girls are mile-a-minuting the *Liberty Limited* from Baltimore to Harrisburg.

So much for the prototypes. The model, in its turn, has the dual advantages of impressive bulk and limited rigid wheelbase. With a twelve-volt A.C. motor and a gear reduction of 25 to 1, she will pull ten pounds of Pullmans with ease.

BECAUSE so many miniature locomotives never get past the semi-completed chassis stage, we're going to build our engine from the stack down, so to speak. This will give the new modeller a chance to start with the less exacting part of the work, and at the same time have something so substantial to show for his efforts that enthusiasm won't flag during the construction of the more difficult driving mechanism. All plans are reproduced in Double-O Gage, but may be readily scaled or photostated to O or HO dimensions. For such transposing, bear in mind that the prototype engine wheelbase is 36 feet 10½ inches; overall engine length (from pilot to buffer plate) 49 feet 1 inch; and the maximum height exactly 15 feet.

A glance at our photo shows how widely wood has been used in place of critical materials. The boiler, steam and sand domes, cylinders and saddle, stack, air reservoirs and pump, headlight and marker lamps, feedwater heater, cab indication receiver box, tender tank and



RIGHT SIDE and end elevations of the K-5, full size for Double-O gage. Left side piping diagram appears on the following page

even the coal pile—all are of hard maple or plastic wood.

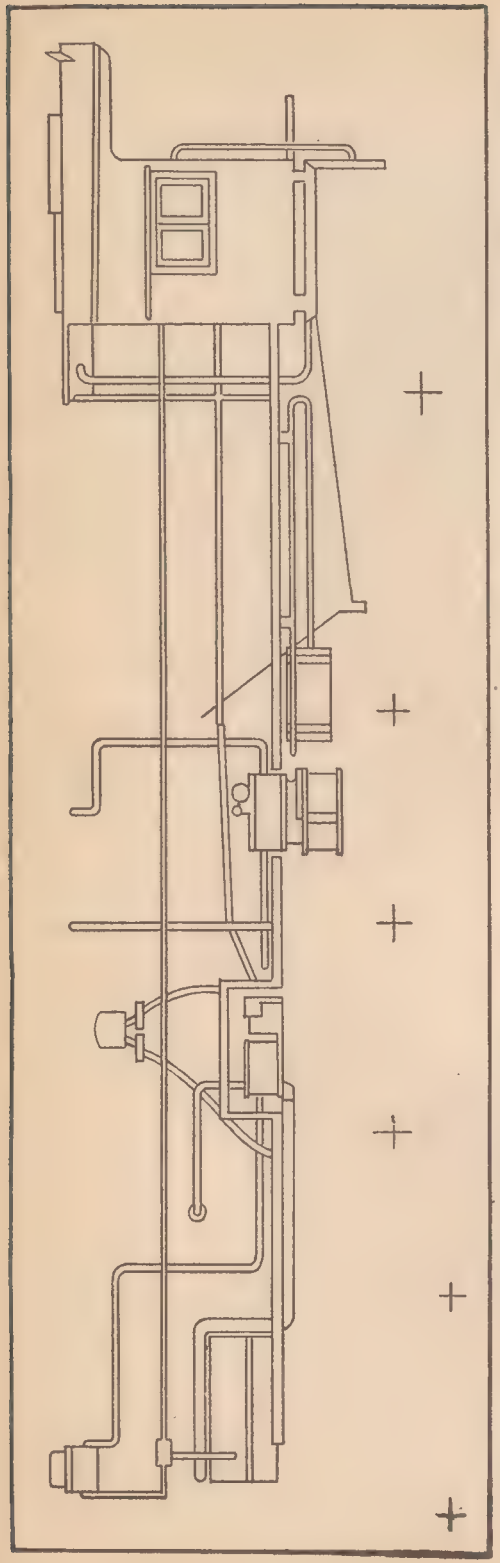
Where tin is used, as in the case of the running boards, firebox and cab, it has come from oil containers which have no wartime salvage value. Bits of wire for piping, brads to serve as studs where metal-wood connections are required, some odds and ends in the way of cast iron, and a pound of solder, just about complete the necessary boiler and tender detail stock.

As for tools, we'll need a vise, small flat and rat-tail files, some sort of a lathe or arbor or drill press on which to make our turnings, a wood chisel, tin shears, soldering iron, long-nosed pliers, hacksaw, brace and ¾ths-inch bit, hand multiplier drill, scroll-saw and hammer.

The first job is to turn the boiler. You will note that the side elevation shows it to be conical in form. Actually the PRR uses an extended wagon top design—that is to say, the bottom of the barrel is straight, with the taper all coming on the sides and top. Since the driving-wheel clearance is sufficient for a uniform cone, however, we will simplify our work by modifying the original design. As indicated by the dotted line, we turn only that portion of it ahead of the hollow firebox which houses the motor. And before removing the wood from the lathe, the bulge of the smokebox front should be cut, along with the flange of the circular door.

Next comes the touchy job of drilling a ¾ths-inch hole through the barrel, from the back end forward to a point just ahead of the smokestack. Then, through the boiler from top to bottom, directly below where the steam dome will be cemented, drive a thin brad and lightly countersink the head. Now tip the barrel on end and pour molten solder into the cavity until a superficial film arcs just above the top of the wood. When the metal solidifies it will shrink flush, and the brad, passing through it, will hold the mass firmly in position. This is the ballast that will give the finished engine much of its adhesion—or grip upon the rails.

It serves a secondary purpose too. For when you have cut a tin form for the throat sheet, or front end of the firebox (note that it is bent back at an angle at the juncture of the boiler bottom and contains a slot which will later align the assembly with the forward engine bearing block), you can solder this piece securely



to the core. To make the joint, the tin should be pre-heated over a gas burner or torch, as the large lump of ballasting solder will carry away the heat of any but the largest iron as fast as it can be applied.

Once securely in position, the throat sheet is ready to receive the Belpaire firebox top and water legs. These are bent to form from one strip of tin and so patterned that the top section will lap over the wooden barrel as indicated in the drawing. Solder the unit to the throat sheet along the inside seam, and fill the triangular cavities between the maple and metal with plastic wood. The same material is used to continue the slant of the throat sheet upward to boiler center-line.

NOW for the cab. Its front and back sheets may be transferred from the plans to templates and then scribed on sections of tin for cutting. Note that the forward member is not solid, but must be filed away to allow a portion of the motor field and brushes to reach back into the cab. It is soldered to the firebox section (again along the inside seams) and in its turn becomes the anchorage for a single unit forming the roof and side walls of the shelter. Before that sheet is applied, however, holes must be spotted for the windows and roof ventilator. A chisel will do this job, and after the sheet is firmly in place and buttressed by the back-sheet of the cab, the openings are cleaned up and trued with a small triangular file. Bottom edges, linking the side-walls to the water-legs, may be extensions of the metal, folded in, or separate stripping. In either event, they are securely joined to the firebox.

Details such as ventilators, rain troughs, casements, hand rails, steam turret, etc., are of tin and wire, carefully scaled and spaced to retain the character of the prototype. As seemingly insignificant as such parts appear, they can make or break a model.

Jumping from one end of the boiler to the other, it will be well to get the cyl-

inder-saddle assembly cut and mounted in position next, since it must be in perfect alignment with the firebox. The form of this metal block is clearly shown in the drawings. In addition to recesses for the boiler and short lengths of maple doweling which form cylinders and valve chests, it incorporates the upper sections of diagonal engine-bed braces. To the ends of these forward stringers a small block of wood forming the cab signal receiver-box is attached with cellulose cement.

A lamination of bristol board, cut slightly larger than the saddle surface, is sandwiched between that unit and the boiler. Cemented in place, it gives the effect of a flange.

The cylinders are not bored to receive the piston rods for reasons which we will go into when we come to the chassis construction.

Stack and steam dome are wood turnings, cemented to the boiler. For the sand dome, sink a small woodscrew into the top of the barrel, model a gob of plastic wood around it, and whittle and sand to shape after it has had a day in which to set. Carve the feedwater heater from a block of maple and place it before the stack.

The wooden headlight must have a bracket, which is best built up by driving two brads, side by side, into the top of the smokebox front. Steps are little wedges of tin, tapped into slots cut in the wood with a razor blade. Follow the same procedure in making the classification lamp brackets. For the lamps, themselves, drill two small holes through a piece of doweling, from side to side, and crossing each other at right angles. Now turn the doweling down to the correct contour and these holes will form the sockets for small glass lenses obtained from a piece of dime-store jewelry. Cellulose cement holds them in position and secures the lamps to the brackets as well.

The headlight generator, whistle and pop-valves are soft metal turnings; the handrails, strips of wire soldered to brass studs driven into the boiler. Similar studs support the running boards. These members are bent along their outer edges for rigidity, the folding being done in a metal vise.

Directly beneath the boards are the power reverse-gear, air reservoirs, compound air-pump and piping. The first item is a metal turning; the second and third, doweling and carved wood assemblies, respectively; and the condensation coils, strips of wire of slightly heavier gage than the hand rails. When you have them all in place your engine is ready for the chassis.

THE tender construction requires little explanation. The tank is fashioned from three laminations. Those on the outside are the exact thickness of the water legs, while the shorter, thicker piece between them comes only far enough forward to form the coal gates. This inside block can be hollowed out to receive flashlight batteries, if you choose to make a working headlight. In any event, it is slotted to receive the rear coal-bunker wall, which is filed from metal and tapped home with a hammer. After the sides of the bunker are beveled inward at the top, a gob of plastic wood is pressed between them and carved to represent a partly depleted coal pile. The coal deck, manhole extension, marker-lamps and rear end-sill are maple segments, while wire serves for the hand rails and ladders. Fashion the steps and water scoop of tin and apply a coupler design of your own choice in the end-sill pocket.

Such minor details as coal gates and their hinges, along with those for the manhole cover, are bits of thin bristol board, cemented in place.

Next month we'll round out the chassis detail and tender trucks along with instructions for painting, lettering and striping. And we've got a track trip reverse-gear we think you'll want to build into this model.

(Model Trading Post on page 145)

True Tales of the Rails

The Boys Go Hunting

By L. L. FARROW

"HEY, wake up! You know what time it is?"

My shout called forth a few grunts from "Swede" Moden, in the bunk on the other side of the caboose. He knew that I'd get up and start the fire if he lay there long enough. And I did; the old pot-bellied stove got a good shake-up, and Swede crawled out a few minutes later.

"No hurry this morning," he yawned. "Look at that snow!"

It had been coming down steadily ever since we pulled into Goodland, Kansas, twelve hours earlier. The Swede and I were brakeman on a local freight between that point and Phillipsburg, a hundred and forty-odd miles east, on the Rock Island main line. This morning, early in March, 1906, we were due to make the run back, as usual, but one look out of the crummy window told us that it would be hours before any trains could move out of the Goodland yard.

The fine, dry snow of the night before had turned into a heavy blizzard, whipped up by winds from the north. Anybody who has lived in that flat, treeless country of northern Kansas knows what happened. Drifts were piled high against the caboose, the rough edges of the landscape were smoothed by the heavy snowfall, and it was a sure thing that trackage was blocked at more than one cut along the main line.

Swede and I got ready to head for the beanery in the depot. My fellow brakeman was a big, good-natured fellow, with straw-colored hair, and strength enough to pick up and carry away anything that wasn't nailed down. He was three or four years older than I, though we'd started railroading at about the same time. His mother called him Cecil, but that crop of light hair just naturally gave him the nickname.

People in Goodland called me "Doc", because my father was well-known in the community as a physician. I started in a callboy, and by the time of this story, I had several years' experience at braking. I was small, but husky, too, and Swede and I made a good team on that old local freight.

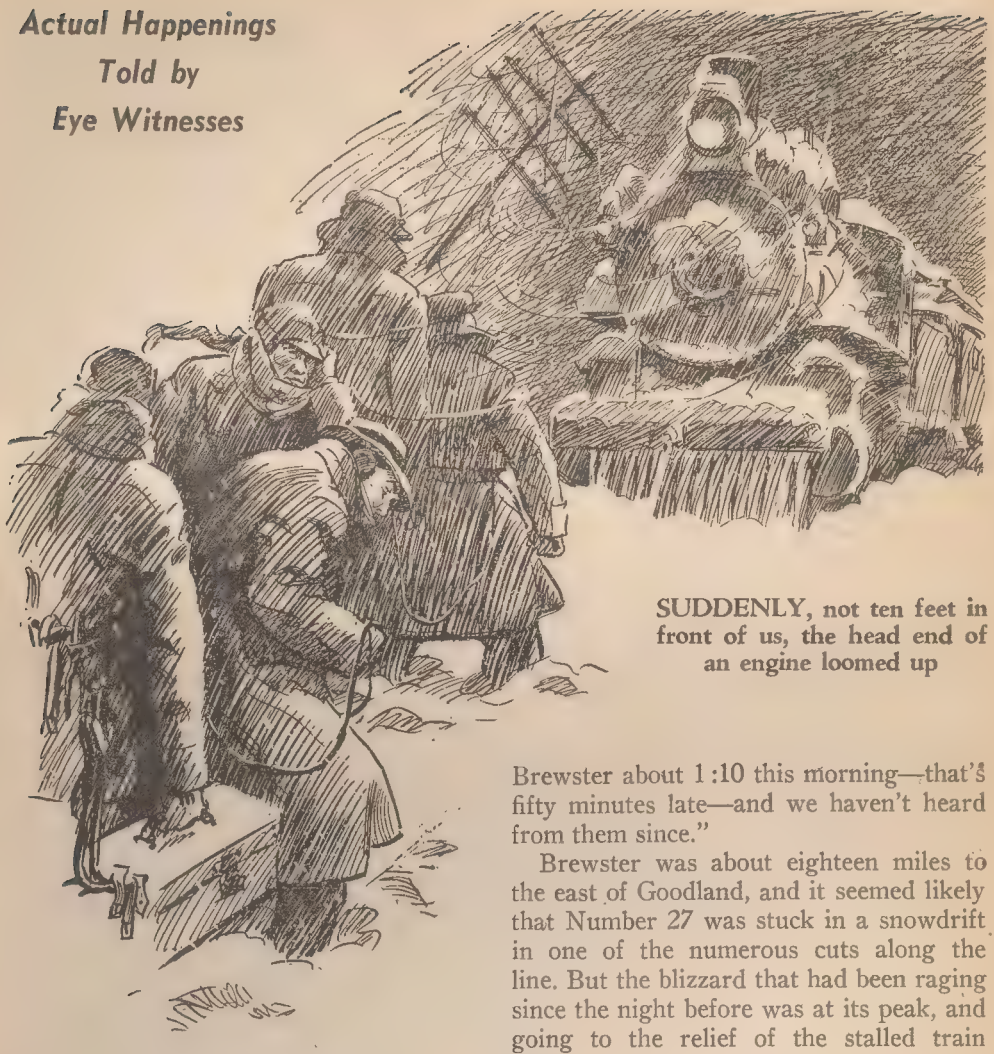
Hunger forced us out of the crummy, finally, into the blizzard, which showed no signs of subsiding. I remember how the wind whistled around and under the string of boxcars that we passed on our way to the depot. Once inside, we settled down to steaming coffee, which the girl behind the counter always produced at the sight of a railroad man, and plenty of the usual ham 'n' eggs.

When we had finished, we looked around for something to do. By that time it was ten o'clock, and a number of men were crowding the depot, tied up on account of the blizzard.

"Let's go up and see when 'Emily' plans to use us," Swede suggested. M. L. Ellis, chief dispatcher on our division, was no softy, but his initials, when pronounced rapidly, sounded like the girl's name, and most trainmen called him that.

We went to his office, on the second floor of the building, and as we opened the door, we heard the chief's voice.

"—Sure feel sorry for that bunch, but I don't know what we can do till the plow gets out here," he was saying to several of the fellows who had collected in the office to wait for their calls.



SUDDENLY, not ten feet in front of us, the head end of an engine loomed up

"Who's that you're sorry for?" I asked.

"Not you guys," the DS said. "You're the luckiest pair of brakemen on the division this morning. I'm talking about Number 27."

Swede and I recognized that train as a local passenger making a regular overnight run to Denver. She usually carried a combination mail and baggage car, three or four coaches, and a couple of sleepers, and was due at Goodland around 12:45 a.m.

"What's the matter? She piled up somewhere?" We both spoke at once, for we knew some of the crew.

"Maybe," Ellis answered. "They left Brewster about 1:10 this morning—that's fifty minutes late—and we haven't heard from them since."

Brewster was about eighteen miles to the east of Goodland, and it seemed likely that Number 27 was stuck in a snowdrift in one of the numerous cuts along the line. But the blizzard that had been raging since the night before was at its peak, and going to the relief of the stalled train wasn't going to be easy. You could see that much with half an eye.

THERE was a number of engines under steam in the round house but the turntable pit had drifted full of snow. The one that was to have taken Number 27 west from Goodland was standing in the roundhouse yard under steam, but she had been there so long that the water had frozen in her cylinders. When the hostler climbed into the cab and opened the throttle, the main rod on the right side bent as the drivers slipped and that finished the last chance for getting out the plow.

Another snowplow kept at Limon, Colo., the next terminal west, had been

ordered out but the storm was raging over the entire division. It had a hundred and seven miles of snow-covered track to plow through, and the chance of its getting stuck in some cut where the large drifts would be made it impossible even to guess at the time the plow would arrive and be able to go to the relief of Number 27.

The chief turned back to his desk. Swede and I walked out into the hall, but instead of going on down the stairs and back to the warmth of the beanery, we both stopped at the head of the stairs a moment. It was just as if we knew what was in each other's mind. I don't know what gave us the idea, but we both seemed to get it at the same time. Maybe it was because we were both young and a little foolhardy, too. Nothing was too much for us then.

"Hell, Swede," I said. "we could find that train. There's plenty of time—we won't get a job out of here until the plows come through."

The big brakeman grinned. "That's what I was thinking. Let's get going."

Just then the door of the trainmaster's office opened, and Dawson, the T.M.'s clerk, stuck his head out. He was a slim, sandy-haired fellow, given to wearing fancy plaid shirts, whom Swede and I both knew and liked.

"Where do you boys want to go on a day like this?" he wanted to know.

Dawson had heard about Twenty-seven, and it wasn't long before he went off to get heavy clothes and join the hunting party. Another friend of ours, Pearl Dix, the division lineman, came along as we were talking. It was his job to keep the telegraph wires in service, and he was going to have plenty to do, but he couldn't get started until the blizzard was over. He was eager to go with us, and so was Chase, a brakeman Swede and I knew, whom we also happened to meet in the hall.

While Dawson was off getting his sheepskin coat, Dix had an idea about equipment we'd need for the search. He got some wire, and a small but reliable portable telegraph key and sounder.

"This might come in handy," he said, as he stuffed it into his pocket.

The chief dispatcher came out to hear what all the commotion and conversation was about. When we told him what we were going to attempt, he tried to talk us out of it—said we were crazy to think of starting and that it was bad enough to have a train lost without having five damn fools wandering around in the storm for him to worry about. But he couldn't order us not to go, and it would have taken the written word of the Old Man himself to hold us by this time.

We decided that we should arrange some way to keep from becoming separated from each other, so we went to the baggage room and found a coil of bell cord which was kept on hand there for emergencies on the passenger trains. With it, we tied ourselves together with about six feet of space between. I was supposed to have a good sense of direction, so they placed me ahead as leader. Then came the big Swede, and after him Dawson and Dix with Chase bringing up the rear.

When we had gone about three hundred yards, we were past the railroad buildings and cars that had partially protected us from the full force of the wind and the chunks of snow which it carried. We were heading eastward and the north wind struck us on our left sides. It didn't seem possible that we could stay out in such a storm any length of time but we just turned our faces away from the wind and kept putting one foot in front of the other.

Conversation was out of the question but about every fifteen minutes I would stop and see if every one was getting along all right. The only one I was really worried about was Dawson, the clerk. He could hardly be expected to stand up to this trip like the rest of us who worked hard in the open every day. But every time a halt was made, he grinned and signaled for me to go ahead. I think the big Swede, right behind me, was pulling the weight of three men some of the time.

AFTER we'd gone some distance, we found that the clothes on the right side of our bodies were freezing, but that only helped to keep the cold wind from penetrating. The effort of walking and

fighting against the wind kept us warm enough.

We had been wading through the drifts, trying to keep to the roadbed as best we could, for about four hours, and had covered that many miles probably, when suddenly, not ten feet in front of us, the head end of an engine loomed up. The pilot was stacked high with snow, and more of it was banked up against the north side. No smoke nor steam was coming out of her, indicating that the fire was out.

As we hurried up alongside, two men stumbled down the steps from the gangway. They staggered and would have fallen if Swede and Chase hadn't caught them. They were Ed Carmichael and E. W. Pratt, engineer and fireman on Twenty-seven, and they had had neither sleep nor food for almost twenty hours. We got them both back to a sleeping car. The two men rolled into the first empty berths they saw, and were asleep as soon as they lay down. We found out that when they could no longer keep up steam in Twenty-seven, they had drained her completely to keep the pipes from freezing.

The rest of us found B. W. Webster, the conductor, in the baggage car. The first thing he wanted to know was whether we had brought along anything to eat, and then he asked where his train was stalled. None of the crew, not even the engineer, could tell where they were because the storm had covered whatever land marks there were in that flat country. They had passed one small station, but none of the crew could recognize it through the snow.

While I was talking to the conductor, Dix, the lineman, and Dawson went to work stringing a wire from the baggage car to the nearest telegraph pole. They hadn't brought enough, but an old-time lineman knew how to handle that situation. He got a piece of barbed wire from the right-of-way fence, pieced out his line to the pole, and in a few minutes the little portable telegraph instrument was set up in the baggage car, ready for somebody who could use it.

Dawson had studied some Morse, and was willing to take a try at getting in touch with the dispatcher at Goodland, but just then Webster came back with a young fellow who had been riding the train on a pass to Denver. He turned out to be a boomer op formerly employed on the Rock Island. In a few moments he was rattling the key to get the dispatcher at Goodland, who on that trick was J. S. Jones.

The rest of us were pretty hungry, and the train crew and passengers on the stalled train were feeling even worse. The five of us foraged through that baggage car to see whether any of the shipments contained food. This seemed no time to be respectful of other people's property.

Swede found five cases of eggs—an express shipment that was going to reach an unplanned destination—and I stumbled on a good-sized box of fresh link sausage and a bag of coffee billed to the John J. Grier eating house in the Limon, Colo., depot. We had the beginnings—but none of us was ready to eat that food raw.

Just then the baggageman volunteered the information that he carried a quart coffee pot and a small frying pan. Armed with these, we went to work at the little coal stove in the car, which had a good fire going in it. The fact that the coffee was roasted but not ground stopped us only briefly. Dawson and Chase pulverized some quantities at a time by putting it in handkerchiefs and then pounding it. The baggageman's frying pan wouldn't hold more than three eggs but I flipped them in and out as fast as I could, and we soon had a meal for ourselves and the train crew.

We didn't waste much time though, for we knew that the passengers needed food as much as we did. I got practice enough that evening to compete with any short-order cook, while the rest of our hunting party strode through the train handing out sausages as fast as they were done.

The Rock Island operator meanwhile was working to get in touch with Jones at Goodland. We heard a good deal of key chatter, and then our emergency sender signed off to tell us the news.

"Two engines headed our way. They'll

have to come down and plow the snow off the track and then go back to Goodland and turn. In a couple of hours, we ought to be out of here."

Those two engines working together could shove the snow off the tracks with their wide pilots, but that old-fashioned equipment was a nuisance later, for they couldn't couple on to our train and pull us.

"I told that dispatcher to send along a couple of cooked hams and some bread," our operator finished.

About thirty minutes later Jones again called and said that the engines were at Goodland and could start in fifteen minutes. Chase and I were in the baggage car when the message came. The storm had lessened somewhat but the visibility was still very poor and there was the danger of the relief locos ramming into our stalled train, so we told him to instruct the engineers not to exceed fifteen miles per hour, and to keep whistles blowing and watch out for flagmen. Then Chase and I climbed into our sheepskins again and started back along the track, our pockets full of red fusees.

We could hear the whistles in the distance, long before the engine came in sight. We flagged them as soon as we could see them, and then climbed on board to ride slowly down to the stalled train.

That ended our job for the day. I flopped down on one of the Pullman seats and fell asleep. But the Swede was busy handing out the food that the Chief had sent along. One of the women passengers volunteered to help, and the last thing I remember about that night is the sight of a tall, slender lady carrying a butcher knife and a loaf of bread, and the Swede behind her, with one of the chief's baked hams in his arms. The lady was offering sandwiches to the tired and hungry passengers, while Swede was bawling good-naturedly at the top of his voice, "Hot dog! hot dog!" He'd found something else beside coffee to drink, I guess.

It was around one o'clock the next morning when the Pullman porter wakened me and told me that we were in Goodland. The Swede and I, and the rest of the hunting party, tumbled out of the train, and we made for our caboose of the Phillipsburg local freight. The fire was out, so we undressed in the cold and crawled into our bunks, half-asleep already.

But five o'clock brought the callboy, just as usual.

"Hey, you guys," he shouted, "this ain't your birthday—you're called to go west on the rotary plow!"

So Swede and I rolled out again. The Goodland trainmaster at that time was one of those lunkheads who figure that a small man is a softy and when I asked his permission to lay off a trip, because I found that I'd frozen my feet the day before, he roared about "warm weather brakemen," and asked why didn't I get out if I didn't like the climate.

I found out later that the T.M. didn't know about our day's work in finding the lost train—he'd been away at the other end of the division when we started out—but I doubt that it would have made any difference to him. I cussed him out, and didn't take the run.

None of us ever received merit marks or commendation letters, but I don't suppose we expected them; our expedition had been exciting, and we'd gotten our satisfaction in stumbling on that cold engine and its crew, waiting anxiously for help.

That was many years ago, when a couple of husky young brakeman, a lineman, and a T.M.'s clerk waded through a Kansas snow storm to find the Rock Island's Number 27. I don't know what became of Chase and Dix and Dawson, but Swede Moden continued to stay on road service, and is living in Goodland; he and I have been friends throughout our years on the Rock Island. I've been a conductor on various divisions—in fact I was promoted to that job not many months after our train hunt—and right now, I'm helping to move wartime traffic on the Oklahoma Division, working out of Shawnee, Okla. Swede retired recently, and I think I'm the only one still in service who went out to hunt for the old Twenty-seven.

Beating the Timecard

By R. J. GUNNISON

ONLY an old-timer would believe a motorman could skin his running time every night for over a year without getting caught. It couldn't be done these days, but during the first World War things were different.

At that time, I was motorman on the old Rochester, Lockport & Buffalo single-track line, making a run of 65 miles between Rochester, New York and Lockport, N. Y. Every night at 8:30 I left the Erie Railroad terminal with a heavy load of Wells Fargo express which had to be in Buffalo by one a.m. to connect with the Wabash. As I was not scheduled on the timetable, I had to run extra. On the timetable they were running a first-class local every hour and a limited every other hour. The trainmaster was checking to see if I exceeded speed restrictions in town limits. I sure did skyrocket through those towns. There were no complaints, either, because I knew the policemen personally and as long as they didn't report me the trainmaster laid low. Everybody knew I had to open her up to reach Buffalo for the connection. They made allowances on that account; but something else was bothering them, as I soon found out.

I hadn't been on the job very long before the boss tumbled to the fact that I was making faster time than the westbound first-class trains. Somehow I managed to get by them, and it burned him up because he couldn't see how. He smelled a rat all right, but couldn't seem to locate the carcass. First thing I knew, he started in riding with me every once in awhile and asking questions.

"How come," he'd grumble, "it takes you thirty-five minutes longer to make this run whenever I'm along?"

"Oh, just a coincidence," I'd answer jauntily. "I can't always get the breaks."

Still, he wasn't satisfied. The last time he rode with me, he said:

"From now on, I'm staying away; but watch your step! I know damn well there's something screwy here. When I'm not around you get her over the road 'way above record time, night after night. It just doesn't make sense."

Well, here's what happened. At the time, we were operating under a book of rules adopted by the Electric Railway Association. No more block stations the way it had been with the standard code. I had my own orders, a phone in my cab, and a "jackbox" I could bank on at every siding, making it possible for me to plug in every two or three miles. If, for any reason, I couldn't make my timetable meet without sticking the opposing train over five minutes, I was supposed to call the dispatcher. He would then change the meet.

By figuring out my running time, I could manage to call the dispatcher two or three times beween Rochester and Lockport, telling him on each occasion that I was farther west than I actually was and arranging to have the other trains wait for me to pass. He would give me a high-ball. Not having to shut off, I could go by them on the brass, with the result that, instead of losing seven minutes, I gained seven minutes. The other trains lost perhaps five minutes, but could easily make that up. There was no kick from the dispatcher. He took it for granted that everything was above board, and he had to get the hotshot over the road.

Another stunt I pulled was this: As I was making faster time than the westbound first-class trains, I often managed to gallop past them without a train order. I could get sixty to sixty-five miles per hour out of my motor. Since it was night, I could easily spot a rear end ahead of

me, or see the flash of a trolley on some curve up the track. I would then light a fusee, jab it into the front end of my cab, and sneak up behind as close as I dared. This was a signal that I wanted to pass. The engineer would pull up at the next siding to let me by.

So with one thing and another, I usually managed to gain my thirty-odd minutes—until the day came, as so often happens, when I got a little too cocky. I'll tell you about it.

There were agents still in all the stations, but they had nothing to do with train movements. However, Agent Calahan at Holley, N. Y., wanted to have a finger in the pie. This fellow had a quaint habit of calling up the dispatcher and telling him every time a train went by. That little foible of his cooked my goose.

On this particular night, things worked out so that I called the dispatcher at Holley. I was aware that Calahan put on the feed-bag at a certain time every night. As I passed the station, I took a good look and he was nowhere in sight.

"Out to lunch," I said to myself. "The coast is clear."

Passing the station, I rounded the curve just beyond. I knew there was a jackbox on the west end of a siding on that curve. There I pulled up and called the DS.

"Extra 302 West at Hulburton siding 24" I said, lying like a trooper. "How about giving me an order on Number 38?"

The dispatcher, thinking I was three miles farther west than I actually was, gave me this order: "Extra 302 West meet No. 38 at Quarry siding."

I had just gotten the complete when Calahan butted in, and told the DS that Extra 302 West had just gone by. As soon as he hung up, the dispatcher called out: "I thought you said you was at Hulburton."

"Sure am," I told him blandly. "Calahan's crazy. I passed Holley six minutes ago."

But for some reason, Calahan sounded more convincing than I did. First thing I knew the Super was around asking questions. In the end, I had to admit I had called from Holley, not Hulburton. From then on I couldn't get away with a thing. There was no kick left in that run from Rochester to Lockport. I might as well have been driving a coal train.

Hogger Talk

By FRANK CLODFELTER

"BACK in the old days," remarked Al Krauss, Pennsy runner, as we coupled the H-9 onto a string of boxcars and waited for the brakeman's signal to test air. "Yes, way back when I was a rookie fireman, you soon learned that a railroad engineer's word was law and order. If your work wasn't satisfactory or if the steam gage lagged a little, it was just about your job if the hogger passed the word along to the road foreman. Those old birds took themselves pretty serious and a tallowpot was just someone to keep up steam and take orders."

This is the story he told me:

I'LL NEVER FORGET my first day with one of those old-timers. The hogger I drew was a prize grouch who seemed to think student firemen were a little lower than mud. When I reported for duty I found him down on the ground oiling around. Seeing me, his greeting was:

"Hey, you! Take this oilcan!"

"Where do I put it?" I asked, looking

helplessly at the can as the hogger started another inspection trip around the steam hog.

"Throw the damned thing into the firebox!" he bellowed.

These words, I learned later, expressed his profound contempt for my ignorance of the proper place to put an oilcan. However, I obeyed him to the letter. A few minutes afterward the old walrus climbed onto the engine and, failing to see the oilcan, inquired about it. I opened the firebox door proudly for him to view the results of my obedience. By this time the can had turned a golden brown color.

"It kinda looks like the way they fix hog cracklin's down South," I remarked complacently.

Well, sir, that hogger was fit to be tied. I have never since heard so many swear words come from one mouth in so short a space of time as those he hurled at me on this occasion. Nor, I might add, has anyone been able to put more feeling into a choice collection of epithets. Gradually it dawned upon me that I had somehow done the wrong thing in taking the engineer at face value when he told me what to do with his oilcan. The lesson sank in deep.

After that, we understood each other and, in fact, became good friends. I fired passenger for him from Baltimore to Harrisburg for seven or eight years. He'd tell me to keep her hot as we pulled the grades, because he had something for me to eat as we coasted down the other side. I could always depend on two apples a day.

"WATCH that smoke screen," cautioned J. W. Fyle, another Pennsy runner, as we passed the yardmaster's office at Gwynns Run with the pop wide open. We got talking together, friendly like, and I asked Fyle to tell me about his first firing job. This he did, as follows:

I HAD PLENTY of trouble that day, back in 1919. I was tossing the black diamonds for an engineer named Thom. We had an H-9 engine, the 1298. I was

working hard, doing a fair job of keeping up steam. I asked Thom to take a squint at the fire. After doing so, he said it was in pretty good shape except that I was sprinkling the coal a little too light in front. So I got busy again.

The engineer didn't notice me for some time after that, until the hand on the steam gage started veering to the left away from the 200 mark. I had been bailing coal up front faster than it would burn. In fact, the arch was so jammed with green fuel that we hung up. I reached for the bar. We didn't have a bar. Not even a clinker hook.

"All right," said Thom. "Get your shaker bar out of the bulkhead!"

The inside of that bulkhead was a terrible sight, because there wasn't a shaker bar to be found. I expected Thom to blow up, but I had sized him wrong. He said he should have checked the tools before leaving the roundhouse and a new fireman couldn't be held responsible.

We delayed main-line traffic while we lowered the old-style front grates to get rid of the green coal. Since that day I have never failed to check the engine equipment carefully before pulling out.

STERLING GRAHAM, who'd had about two years experience on the right-hand side, related an episode with another old-time hogger—back in the days before the *Liberty Limited* and the *Spirit of St. Louis.*

I'D BEEN weilding the scoop seven or eight months and was called to fire a passenger train from Baltimore to Harrisburg. I climbed on the engine at the Orangeville roundhouse and spoke to the engineer, who was noted for being about the most profane man on the division. The hogger was filling out his timecard and didn't speak or look up. I busied myself getting drinking water, setting the lubricator, and checking the tools.

A little later he asked: "How damned long you been firing, boy?"

I didn't like his attitude, so I replied curtly, "Two weeks."

Well, that set the fireworks off. He swore a blue streak; he cussed the crew dispatcher, the road foreman, the Pennsylvania Railroad and all its officials.

"Here they call a new man out to fire their crack Buffalo train!" he roared. "For two cents I'd go to the phone and tell them to mark me off this trip."

"All right," I answered. "You can mark off or not as you wish, but I was called to fire this job and that's exactly what I'm going to do. Ten minutes of straight cussing is enough for anybody."

The engineer shut up like a clam. Much to his surprise, I did a good job of firing both ways. I caught the job several times, but never again had trouble with him.

ARCHIE THOMPSON, known as "Red," is a Pennsy hogger who is fond of laughing and telling stories—that is, when he doesn't have hold of the world's most powerful electric passenger engine, the GG-1.

Red doesn't like or even respect you if you agree with him on some topic of conversation. He continually wants an argument to keep things lively. One time he ran a passenger train a few car-lengths past Halethorpe, Md., because of failing to make his air applications quickly enough. Instead of shortening his life by cursing or getting nervous, he stuck his head out the window and hollered at the people on the platform:

"Don't go home folks! I'm coming back."

On another occasion he was running iron ore down the port road from Enola, Pa., to Bay View yard in Maryland. The bakehead, being rather new on stokers, eventually got the fireman's work-saver out of order on the L-1. So he stepped over to Red and asked:

"Oh, Mr. Thompson, what do I do now?"

The engineer replied: "Dive in the deepest pool you can find in the Susquehanna River and bring me a pebble off the bottom."

After that the fireman left Red alone, and they got over the road famously.

On the Spot

Rails and Fans Sit in with the Editorial Crew to Swap Experiences, Offer Ideas and Settle Arguments

YOU guessed it. Paper rationing, like that of meat, butter and shoes, is becoming more acute. There's a manpower shortage in the lumber industry from which paper is made. Last month, you remember, the Federal Government cut our quota ten percent, putting us back temporarily on the old basis of 144 pages plus covers.

Fondly we had hoped the shrinkage would end there. But it didn't. Along comes another WPB order for paper reduction. This time, instead of lopping off pages, we are obliged to use a lighter grade of paper, with less margins at top and bottom. There are still 144 pages. Thus the total space available for pictures and text is identical with last month's issue.

Now, we don't like this kind of paper stock or skimpy margins any more than you do. But the war is still on; and until the wild beasts of Europe and Asia are caged, there are not lumberjacks enough to fell the trees needed for paper. Meanwhile, we will carry on, with added emphasis upon the editorial quality of our contents. We feel sure that "rails" everywhere understand the crisis and will continue to give us their time-tested loyalty.

Oh, yes, there's another wartime measure. If you've been reading the newspapers or listening to the radio, you know that second-class postal rates are going up. That is to say, it will cost us more than ever before to mail the copies of *Railroad Magazine* to subscribers. And so, beginning on January fifteenth, the price of a year's subscription will be raised to $3 in the United

States, its dependencies, and Mexico and Cuba. The Canadian subscription rate, $3, is unchanged. All other countries, $4 a year. Our news-stand price remains the same, 25 cents a copy.

* * *

RAILDOG. While the November *Railroad Magazine* was being put to press, *Little Hop,* whose picture appeared on page 143 showing her leaping from the gangway of NC&StL Number 566 to the broad shoulders of Engr. Tom Couch, met death beneath the wheels of a sister engine. This obituary comes from Herbert G. Monroe, ex-trainman, Southern Ry., now on the *Atlanta Journal* staff.

Herb tells us that *Little Hop,* a white terrier, was born in the roundhouse of the NC&StL's Atlanta shops. She took a particular liking to Tom Couch. The big engineer was soon calling her "my girl" and bringing her tidbits every afternoon he reported for his turn in the yards. Together with two sisters, *Little Hop* would frolic up and down the pile of fine coal near the shop's engine-room. Tom would scold her for getting dirty, then scrub her clean again.

This terrier soon learned the time of afternoon when Tom was due and would always be waiting for him. When he strode into sight around a curve, a flash of white raced across the tracks and leaped into his arms. *Little Hop* know everyone regularly employed in the large yards and barked an alarm when strangers approached. For two years she roamed the place, dodging engines and cars and riding the cab with Tom, without being hurt.

Then one day, like many seasoned rails before her have done, she took a chance. She went to sleep in the cool shade of a big locomotive. When Tom came through the yards that day from his nearby home, *Little Hop* failed to meet him. The engineer was worried. He walked on toward the two-story brick building where enginemen reported for their runs, looking right and left for his little pal, occasionally whistling and calling: "Here, girl! Here, girl!" But this time *Little Hop* failed to keep her rendezvous.

One of the men broke the bad news. "She's dead, Tom," he said. "Went to sleep under one of the gliders. Her neck was across the rail and when the hostler moved the engine—Well, we buried her in a special box back of the call office."

* * *

TAL MOREHEAD, who works in the Espee yards as Tucson, Ariz., wrote an item about *Boots,* the raildog there, which appeared in our Sept. '43 issue under the title "Railroading Lady." As a result of this, Tal received not less than 40 letters from all over U.S. and Canada, including some from friends, now working on other roads, whom he had not seen nor heard from in years.

* * *

DON'T mention it to any brass collar, because animals aren't allowed in engine cabs, but the other day I saw a raildog in the fireman's lap when a train passed me on the Great Northern's Spokane Division. —WALTER E. THAYER *(GN gandy dancer),* Box 927, Chelan, Wash.

* * *

RECORD RUN. This item from the *Oakland* (Calif.) *Tribune* comes from W. I. Christie, editor of the *Hanford* (Calif.) *Sentinel:*

"On November 15th, 1889, at 7 p.m., the first through run on the *Transcontinental Fast Mail* left Omaha for San Francisco and Portland 40 minutes late. Connected with the Oregon Short Line at Granger, Wyo. Scheduled to arrive at San Francisco 9:30

Photo from Harold A. Hill, Earlington, Wash.

FIRST official passenger train on the Wild Goose Railroad pulls into Banner, Alaska, near Nome, in 1901

a.m., San Francisco city and California mail distributed enroute. Mail train advertised to be the fastest on the SP and UP systems. At Evanston the train was 50 minutes late. A freight engineer named Bill Downing was placed in charge. Bill said: 'It is 76 miles to Ogden, and I will not be happy unless I make it in 72 minutes.' He was told that such a run was impossible down Weber Canyon. Nevertheless, that 76-mile run was made in 65 minutes and the first *Transcontinental Fast Mail* arrived at Oakland pier only five minutes late."

* * *

MARSHALL E. SCHAEFER, old-time C&NW, Burlington and D&RG telegrapher, now in U. S. mail service, says he has never missed an issue of *Railroad Magazine* since he started reading it in 1907. His address is 200 Sterling Place, Brooklyn 17, N. Y.

* * *

A SAILOR who's a furloughed locomotive fireman from the Pennsy's Cincinnati Division puts his feelings into the following rhyme. His name is John A. Schwartz, MoMM 2/c, care of Fleet Post Office, New York, N. Y.:

OFTEN as I sail the tossing sea
My thoughts drift to times that used to be,
To brakemen 'round the Y.M.'s shack
And swinging lanterns aside the track;
The sidetracked road hog's mournful wail
Whistling signals to the passing mail;
The rear-end's highball to let 'er roll;
Tallowpot's rhythm as he's shoveling coal;

Hot engine grease and hissing steam;
Engine- and train-men working as a team;
Gons, flats and boxcars all together
Rolling through in every kind of weather;
Ham and eggs at the end of the run;
Track gangs sweating in the summer's sun:
These are the scenes I best recall.
I long for the day I return to them all.

* * *

BOOMER Machinist, R. E. Nichols, 533 Thorn St., San Diego, Calif., says he began reading *Railroad Magazine* in 1910. It was then called *Railroad's Man's Magazine*. He picked up his first copy in Great Northern depot at Seattle, Wash., and has read nearly all of the issues since then. His father was at one time master mechanic on the Minnesota Transfer RR.

Mr. Nichols has an old photo of the CStPM&O shops at Sioux City, Iowa, "that looks like a cyclone hit it." He wants to know if some Sioux City shop man can supply information about the picture, which he offers to loan to a responsible old-timer who'll return it. He also asks where he can buy a real "signal" blue shirt with white polkadots.

* * *

RARELY do we run anonymous comments in this department; but for reasons you'll discover when you read the letter, we offer the following from an old retired boomer now basking in the golden sunlight of Los Angeles:

Fifty years ago, the master mechanic of an Eastern road called me into his office and offered me a job as locomotive boiler inspector.

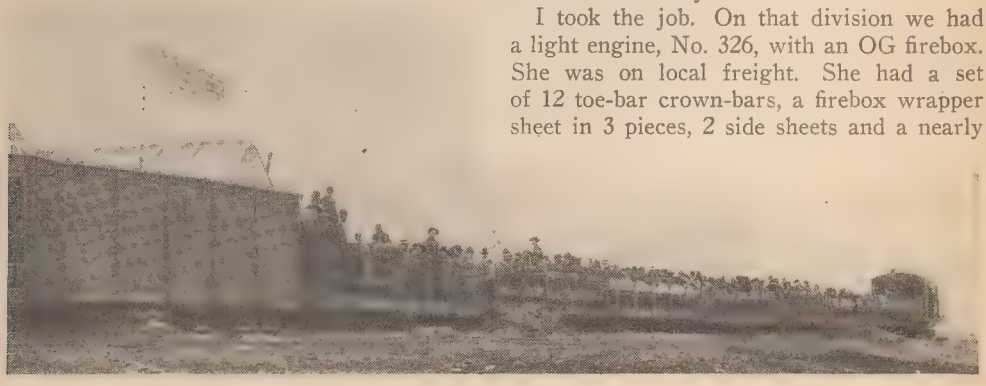
"You wouldn't want me," I said.

"Why not?" asked the M.M. in surprise.

"Because I would turn in the actual condition of engines."

"Fine! That's just what we want."

I took the job. On that division we had a light engine, No. 326, with an OG firebox. She was on local freight. She had a set of 12 toe-bar crown-bars, a firebox wrapper sheet in 3 pieces, 2 side sheets and a nearly



Pullman Company photo

PIPE ORGAN in No. 100, private car of the Kansas City Southern, escaped damage in a costly fire which wrecked the interior of this antique showpiece, on a siding at Kansas City, Mo. (See page 125)

flat crown-sheet with a riveted seam on the fireman's side that the engineer's report sheet for months had reported as leaking badly. The seam had been calked repeatedly but still leaked.

So I put engine 326 in the hole, out of service. There were no flashlights in those days. The 326 had a row of washout plugs in the outside wrapper sheet along the water line. Removing these, I twisted a wire with a little asbestos on the end dipped in oil. Looking into the engine's water space in steam space, I saw there were no sling stay straps on the toe-bars on the fireman's side but only on the engineer's side. I requested the foreman to have the throttle box removed and I entered her steam space for a close-up view. On the fireman's side I discovered there had never been an application of sling stay straps. There was no impression in either the toe-bars or T-bar lugs on the outside wrapper sheet.

Too many things were wrong for me to mention here. I made out my report to the master mechanic, telling him the engine had been in that dangerous condition ever since she came out of the main-line general shops seven months before. Going over to the M.M.'s office, with this report in my hand behind me, I said:

"Well, it's happened!"

The official gave me a funny look.

"What do you mean?" he asked.

"As we agreed, I am turning in the actual condition of an engine."

Then I showed him the report, and insisted that he turn it over to the General Superintendent of Motive Power. He did so reluctantly. The big boss ordered an investigation. Nearly every man in our shop and in the general shop was discharged for releasing to service an engine in this condition! It was a wholesale firing spree.

So I say, a boiler inspector should keep two sets of books, a clean-sheet book for the M.M. and private dope for the boiler foreman and shop inspector. The M.M. really did *not* want to know the actual condition of his engines. In those days, before we had Federal boiler inspection, you had to have a big drag to pull a dangerous engine out of service. When there was a shortage of motive power, an honest inspector was not likely to hold a permanent position. These are the sentiments of an old-timer who is not signing his name.

INTRODUCING Joe Easley, creator of *Along the Iron Pike,* one of America's foremost railroad illustrators. Easley was born in the Ozarks but now lives on Staten Island, in New York Harbor. There's nothing this fellow likes better than to draw railroad pictures. Even as a boy he'd hang around stations and yards, climb up on bridges or embankments, and sketch engines, trains, all sorts of equipment, preferably action studies. This fact, perhaps more than any other, explains the popularity of his illustrations. Joe's work, especially comics, appears in various national publications.

* * *

GLEN RIDGE DEFENSE UNIT wants to thank *Railroad Magazine* and the Erie Railroad for the ties we have just obtained for use on our rifle range, thus enabling us to continue unabated our pistol and rifle practice—SYDNEY A. LAZARUS, company clerk, 68 Forest Ave., Glen Ridge, N. J.

* * *

YOUNG OP. Philip Mihorean of this village, whose father is a Canadian National section man, became proficient in telegraphy at 13 years and 6 months while attending the local high school. During the 1942 summer vacation, when he was 14 years and 6 months, he acted as assistant telegraph agent at an uptown office. Since then he has passed the standard railway rule requirements and worked as assistant agent at terminal points. But for the fact that his junior age status bars him from employment as a telegrapher, Philip would have filled such a position admirably.—Y. B. TRACY (*CNR agent*), Richmond Hill, Ont., Canada.

* * *

BLAKESLEE'S cover painting on the December *Railroad Magazine,* showing a Southern Ry. train, appeals especially to me, a Southern locomotive fireman, because it is a true picture of operation near here. I consider this railway in the Blue ridge setting a photographers' paradise for both black-and-whites and Kodachromes. Our 1400 class Mountain or Pacific type engines,

painted dark green, as viewed against a mountainous background is a beautiful sight indeed. Although I'm a camera fan as well as a fireman, I prefer paintings rather than photos for magazine covers, because a painting gives something for the imagination.—FRANK CLODFELTER, 9 Plymouth Circle, Asheville, N. C.

* * *

KID TALLOWPOTS. In regard to C. D. Croninger's recent letter about having fired the *20th Century Ltd.* when he was only 18, I rise to remark that we have many young firemen here on the Pennsy's Fort Wayne Division who can just about equal that record. In fact, we even have an extra engineer, Jim Curry, who is but a few months over 21.

Right now, with many of our firemen entering the armed forces and some others being set up, most new men get regular freight pool jobs in a few months. We have some fellows with only 15 or 16 months' seniority firing regular passenger runs. I myself have been firing 22 months and am now only 20 years old. I fire west out of Fort Wayne on No. 1, the *Chicago Arrow* (is that the country's fastest steam run?) and back on No. 200, the *Southland*. One day we ran from Fort Wayne to Liverpool, O., 118 miles, in 86 minutes! Which is really traveling. The same day we clocked ourselves at 104 m.p.h. about six miles west of Plymouth, Ind.

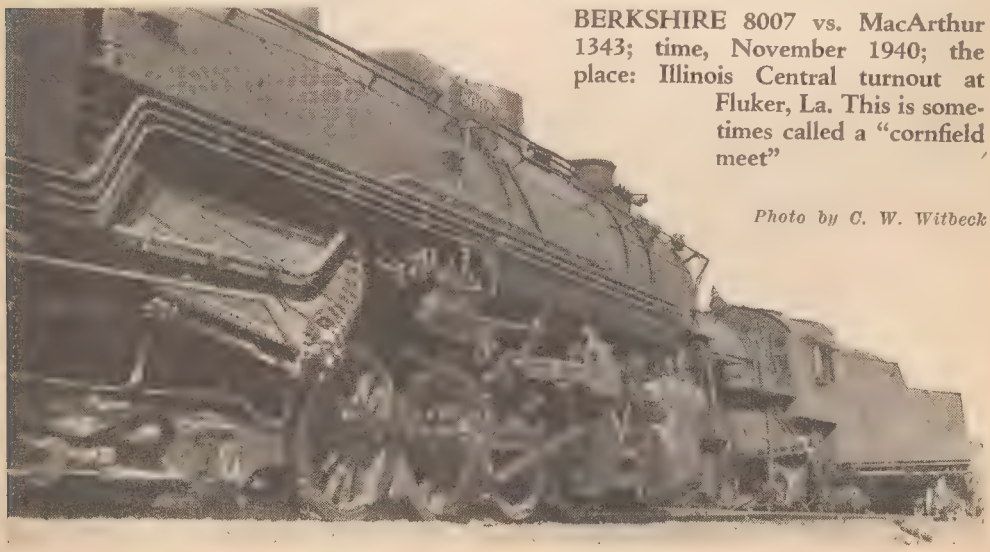
My father has been switching for the Chicago & Western Indiana almost 27 years and my younger brother is a yard fireman on the Pennsy's Chicago Terminal Division, but I expect to be in the Army very soon.—J. R. CROSBY, 2842 W. Palmer, Chicago 47, Ill.

* * *

SPEED WAR. It seems that my letter about train speeds *(June '43)* revived an old feud that once prevailed between the Seaboard and the Atlantic Coast Line. Being a fireman on the Seaboard's Virginia Division, I need not tell you which side of the fence I am on.

V. E. Unmissig *(Dec. '43)* told about the speed of ACL trains between Richmond, Va., and Rocky Mount, N. C. Since my worthy opponent has ridden both roads, he doubtless knows that if the Seaboard had the "sea level" route over which the ACL operates between Richmond and Florida, the Seaboard train would probably attain much higher speed than those of their rival at every point enroute.

In comparing the ACL between Richmond and Rocky Mount, as Unmissig did in respect to the speeds attained on that division, the same division of the Seaboard would be between Richmond and Raleigh, N. C., which gives the Coast Line the advantage. The Seaboard's roadway between Richmond and Raleigh is full of "riprap" country, hills and 1.1 percent grades, whereas the ACL between Richmond and Rocky Mount is "sea level" and with numerous straight stretches. ACL trains would almost certainly be much



BERKSHIRE 8007 vs. MacArthur 1343; time, November 1940; the place: Illinois Central turnout at Fluker, La. This is sometimes called a "cornfield meet"

Photo by C. W. Witbeck

CAB of the Espee's 1503 has probably long since whooshed from the bomb bay of a Flying Fortress. It was tossed on a Sacramento scrap heap in April, 1939

slower if they had the same road conditions as the Seaboard.

But you must hand it to the ACL; they led the way in the South when they bought some of the finest 4-8-4 type steam engines in existence today on any road. Long may those 1800s ride the rails!—WILEY M. BRYAN, M-2-A Cameron Courts Apts., Raleigh, N. C.

(Editor's note: J. N. Huff, Miami, Fla., reminds us that the Seaboard has been using Diesel-electrics for some time in all 3 classes of engine service, passenger, freight and yard, but had not heard of ACL using 'em in any but passenger service.)

* * *

M. C. SALLY, boomer telegrapher, get in touch with us. We'd like to publish the hand-written manuscript you sent us a few months ago, written in a typical "op fist"—old-time reminiscences, including a mention of the official who wouldn't hire a man who smoked cigarettes or parted his hair in the middle.

* * *

FLAMES of undetermined origin badly damaged a famous old private car, No. 100, built by Pullman in 1898 for Arthur Stilwell, President of the Kansas City, Pittsburgh & Gulf (now Kansas City Southern), when it stood on a siding at the union station, Kansas City, on March 24th, 1943, shortly after a run over the line with Chief Engineer Arthur Reece. *(See page 122.)*

This car was widely admired for its mahogany and walnut paneling, its exquisite metal fittings, its rugs and drapery, and its little pipe organ. According to the *Kansas City Star,* the car "was a legend in railroading, its days of glory going back into the last century when railroading was as romantic as flying." President Stilwell, who sported mutton-chop whiskers, had the organ installed so he could hold religious services on Sundays. At times he persuaded members of the crew to worship with him.

Stilwell's dreams of railroad expansion led him to bankruptcy. John W. ("Bet-You-a-Million") Gates took over the road's financial ills and car 100. The pipe organ was remodeled to resemble a desk, and high stakes flowed across the dining-table a few feet away. J. F. Holden, now a retired KCS Vice President, later inherited the car and restored the custom of holding church services in it, Holden himself playing the hymn music. Eventually No. 100 passed on to other officials. The fire, which destroyed paneling, fittings, rugs, etc., spared the old organ.

* * *

HALF-PINT HOGGER. The author of that true tale in our Sept. '43 issue, Engr. David J. Welch, Box 296, Tracy, Calif., retired from the SP last July.

"At that time," he writes, "Fireman Thomas F. Watson and I were the only engine crew who were members of the Railway & Locomotive Historical Society."

Dave takes issue with several points in Arthur C. James's "Adventures of Engine 3041" *(Aug. '43).*

"First," he writes, "I will straighten out the Atlantic type engines in James's tale. Class A-1 had 84-inch drivers and were

Photo (about 40 yrs. old) from David L. Joslyn, 2164 Castro Way, Sacramento, Calif.

A SMALL CRANE carried on the pilot of SP engine 1008 was used for loading and unloading articles too heavy to be lifted by hand, around shops and freight stations. A windlass or winch on the opposite side of the crane mast was worked by "armstrong" power

numbered 3000 to 3015. The one or two freaks mentioned were Class A-2, 3016 to 3024, and had 79-inch drivers. The Class A-3, 3025 to 3071, were built as simple engines with 2028-inch cylinders and 81-inch drivers. Engine 3041, in this class, was rebuilt with 73-inch drivers, but was rebuilt again to standard with 81-inch drivers."

Dave points out that Class A-6, numbered second 3000 to 3003, was rebuilt modern by using some parts of Class A-3 locomotives that had been scrapped. These have 22x28-inch cylinders, 81-inch drivers, trailer booster, feedwater pump and Walschaert valve gear, also air power reverse, being the only Atlantics with outside valve gear. The Class A-3 "wrinkle bellies" were very slippery, according to Dave; it was almost impossible to start a train with them without spinning the drivers.

The locomotive involved in the "$17 train robbery" near Benicia, Calif., on April 16th, 1910, was No. 1457, not 3041, Half-Pint declares.

"This engine burned oil. When the robbers opened the throttle and turned engine 1457 loose, they neglected to open the firing valve that regulates the flow of oil to the firebox, with the result that steam was low when the runaway was switched into some cars on a siding at Tolenas, and little damage was caused."

Dave now takes up the cornfield meet on March 10th, 1909, at Cannon, Calif. "This head-on collision might not have happened if engine 3041 had been on train No. 4 on that trip. However, the engine used was 3018, manned by Engr. John Sankey and Fireman Joe Taylor. Tom McCord was the skipper. Sankey was on short time when he stopped to head in at Cannon for No. 9, and when he tried to start again the drivers spun around futilely. The train had not moved when No. 9 showed up around the curve at high speed. Sankey did not back his train out of that siding, as Mr. James claimed.

"Number 9 was the *Fast Mail,* with no speed limit. Its engine, 1457, was manned by Engr. Bob Aiken and Fireman Jack O'Leary, the conductor being Emory Burns. Track curves to the right (not on the fireman's side) around a hill that obscures the engineer's view; so it was not possible for Bob Aiken to stop his train when he saw No. 4 standing on the main in front of him. All he could do was clean the clock, close the throttle and join the birds. O'Leary jumped also.

"Engine 1457 was making about 30 m.p.h. when she smacked 3018 on the nose. Both reared up on their hind legs. So tightly were they locked together when they settled down on the track again that they had to be towed away from the wreck while still in that embrace. In those days we had no welding torches to cut them apart.

"Contrary to James's report, Aikens's

shoulder was dislocated and O'Leary's left knee was injured so badly that he could not walk without crutches for the next six months. Even so, Jack O'Leary is today the only survivor of the enginemen and conductors involved in that wreck of nearly 35 years ago. He is now engineer on the SP streamliner *San Joaquin Daylight*, running between Oakland and Fresno, Calif. I checked with him on the wreck details."

Before Dave Welch was set up as a runner, he broke behind John Sankey and Bob Aiken, and fired for both of them. In fact, in 1903, they helped him to land a job firing. As for engine 1457, "she was the pet of all the men who fired her," Dave recalls, "and was a popular exhibit in the San Francisco Midwinter Fair of 1915, being mounted on rollers so the drivers could turn. Parts of her steam chest and cylinder were cut away to permit visitors to view the operation of piston and valve gear."

* * *

ZULU CAR. Rail and Government officials are urging heavier and fuller loading of freight cars these days.

"For capacity loading," writes "Sparky" Heilbron of Roseville, Calif., "a farmer named Lee A. Hall wins the prize. Hall recently moved —lock, stock and barrel—from his 2400-acre ranch near Baker City, Ore., to Camp Verde, Ariz., and heaped all his farm and household goods into a boxcar. This 'zulu' passed through the Espee yards here. Not an inch in the car was wasted."

In one end, Sparky tells us, were piled the furniture and other household goods, with farm implements packed tightly against them up to the roof. Mixed with these were crates of chickens, many buckets of water for the stock, and bales of sweet-smelling hay. The farmer himself, traveling in the car, had his bed in this end, consisting of a mattress tossed over a Deering hand plow, a

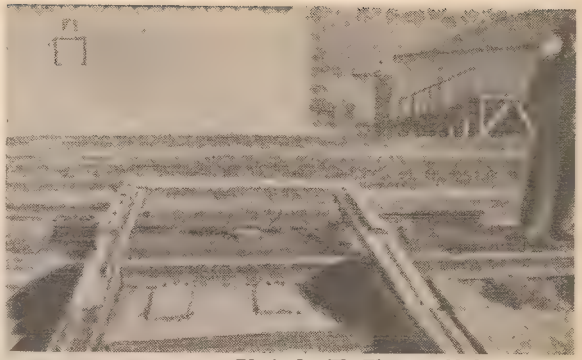


Photo by W. Thayer, Chelan, Wash.

TURNTABLE? Well, maybe. Joe Rennich built it at Great Northern section 0-3, Chelan, Wash., for turning the track car

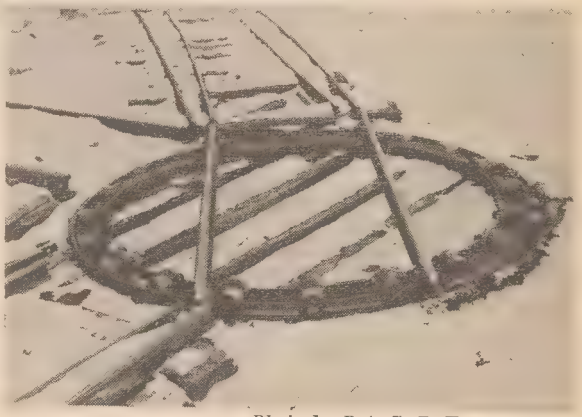


Photo by Pvt. G. P. Vance, USMC

ANOTHER odd-looking turntable is this arrangement on a mine road near Abingdon, Virginia

Photo by Capt. Alex. L. H. Darragh, CE

"MERRY-GO-ROUND" on the old Pittsburgh, Lisbon & Western near New Galilee, Pa. Car is No. 22. At the left you see Condr. Geo. McClain and at the right Engr. Herbert M. Baumgartner

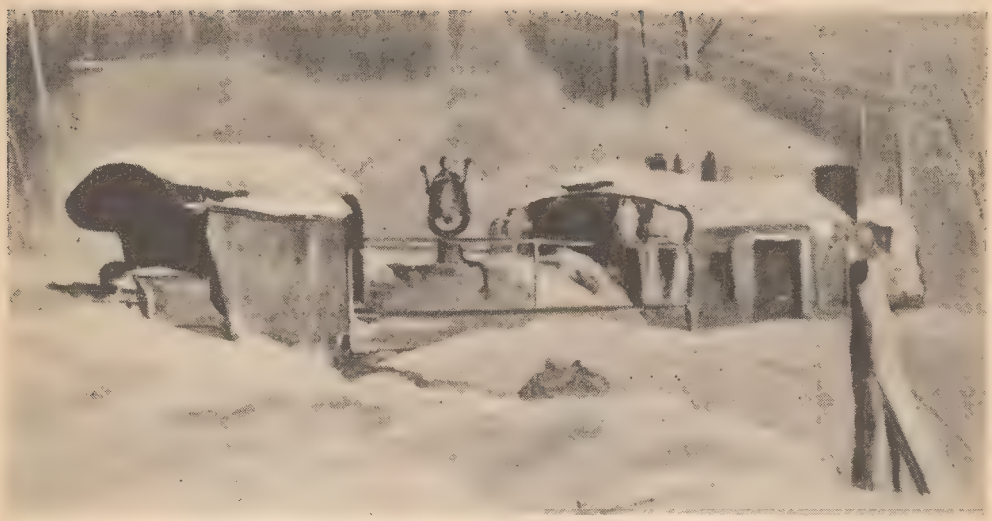


Photo from George M. Hart, George School, Pa.

LOAN us a shovel and we'll tell you the number of this Reading girl, buried in a snowdrift at Worth's Woods, Pa., on the Newton Branch. By her bell placement, she should be either the 7 or the 149

small garden cultivator and a few pails to serve as springs.

The other end of the car was occupied by nine horses, in stalls. In the center stood a huge tractor—so big that it provided housing accommodations for *Susie,* the family cow, and *Drum,* the droopy-eared pointer dog. During the long trip Susie gave a couple gallons of milk twice a day, while the hens continued to lay eggs. Even at that, Farmer Hall was disappointed because he couldn't find room in the zulu for his wife and six children.

This form of travel was common in the last quarter of the 19th century; but we don't know why a boxcar loaded with a migrant's farm and household goods is called a "zulu." Maybe some old-timer can explain. The term came into use about the time of the Zulu wars in South Africa. It may have had something to do with the fact that British settlers in Africa packed their stuff into wagon trains to flee from wild Zulus.

* * *

O'SHAUGHNESSY, a poem reprinted anonymously in our March '42 issue, dates back to the days of early railroading on the Great Northern, then named the St. Paul, Minneapolis & Manitoba, we learn from Lee Howard, 7105 N. Macrum Ave., Portland, Ore.

Lee writes that the winters of 1879, '80 and '81 were very severe, with heavy snow that tied up traffic for weeks at a time.

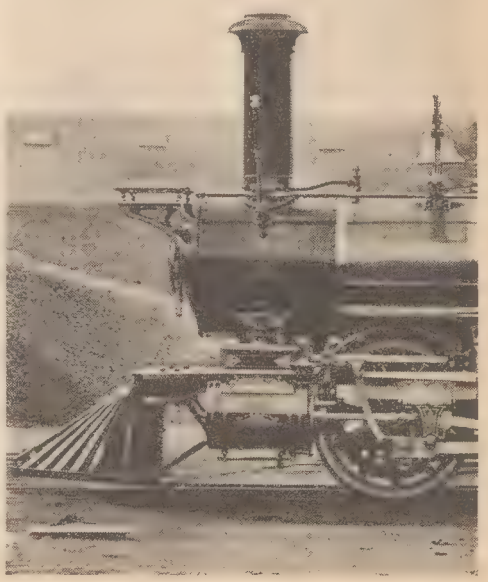


Photo from Railroadians of America

NEW YORK AND MANHATTAN BEACH bought this pretty little bogie engine from Mason

After a blizzard the settlers living in sod shanties nearby were hired to shovel snow out of the cuts, while wedge plows cleared the level ground. Among Lee's neighbors at that time was Tommy Miller.

"Tom's crops and mine were so poor," he continues, "that we both went railroading. We broke for a rawhiding conductor named Burbank, but I soon pulled the pin and beat it up to Alaska. Tom stuck it out, becoming a baggage-master on Burbank's run. Being a humorous chap, he wrote the poem *O'Shaughnessy* to describe his unhappy experiences as a brakeman. He used the Irish brogue, since most of the men were Irish. The poem made a hit and in time several versions of it were being sung."

The version we published begins, "Me name is O'Shaughnessy," and ends:

"May the devil take the son of a gun
Who put me braking on the train."

The original poem was somewhat more ribald. Railroading itself was rough and primitive in those days, Lee recalls, with no air-brakes or automatic couplings. The roadbed was just a ridge of dirt, with ties three or four feet apart. Conductors and engineers made their own rules and fought each other for authority. Trainmen devised their own schedules. Grades were so uneven that you couldn't ride on top of a boxcar safely.

"Every spring," Lee goes on, "most of the traffic was homesteaders from the East. The settler would charter a car—a zulu—load into it his family, livestock, furniture and farm implements, and if there wasn't room enough inside he'd fasten some of the stuff on top of the car, and then head for the West. Upon reaching his destination, the first thing the homesteader did was unload his team and wagon, hitch up and drive around until he located a suitable claim as near as possible to the railroad, meanwhile leaving the other members of his family to unload the rest of the zulu as best they could.

"In the fall most of our freight was wheat. Long trains of it rolled eastward to the big cities. There wasn't much freight in winter; but when we did run a freight train and got snowbound, the whole crew had to clear the track with shovels and picks. Yes, snow often drifted so hard that we had to use picks. If we couldn't clear the rails we'd climb a pole, cut in on the wires and call for help. Of course, if the wires were down, there was nothing to do but hike to the nearest station, no matter how far away it was. I remember the time snow had piled so high in front of the tiny frame station at

Niagara, Dakota Territory, that when our plow hit the snow bank it crushed in the sides of the depot."

Lee pays a tribute to Jim Hill, whom he says was not backward about grabbing a shovel from some poor snow-cleaner who was cold and tired, taking over the job himself. At the same time Hill would send the fellow back to the presidential car that followed the snowplow. There he was revived with hot coffee and food.

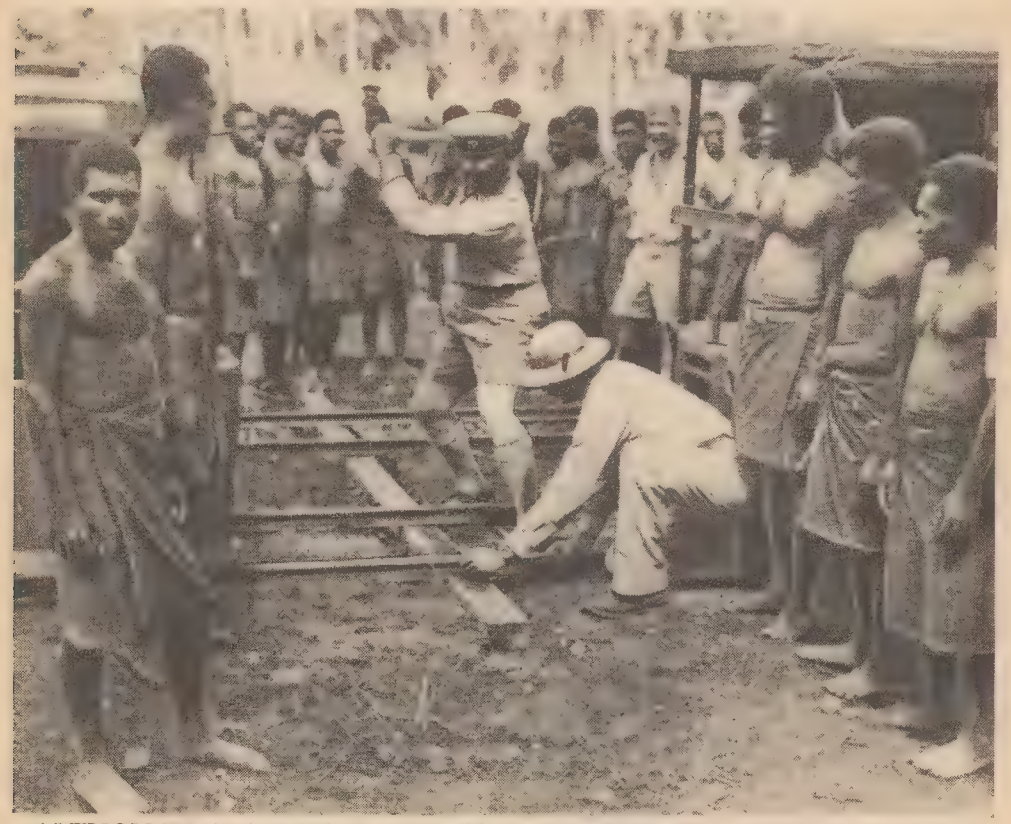
"Jim would shovel snow for hours, relieving first one man, then another, for he was a tough old bird and knew most of his employes by their first names. He'd cuss impartially, too. Jim was used to having his own way and would raise cain if he couldn't get it. I once heard him compliment a trainman who violated a rule for a good reason, saying: 'I hired you to use your own brain, not mine.'"

Long since retired, Lee still reads *Railroad Magazine*. "The mournful whistles of Portland, Spokane & Seattle engines awake me in the night," he concludes, "and give me sweet dreams of days long past."

* * *

ABANDONED after entertaining both youngsters and grown-ups for about 28 years, the Venice Miniature Railroad has recently come to life again. Residents of Los Angeles recall this pike that used to operate on the southern California beach of Venice, not far from the big city. Since its right-of-way partly followed these canals, the line folded up when the canals were filled in. The Lilliputian equipment passed through several hands, in disuse, eventually landing in a junk yard.

From there it was rescued by A. T. Smith, who had been a locomotive fireman on the Rio Grande Southern in Colorado and later on the Santa Fe's San Diego-Los Angeles



ALTHOUGH the last spike wasn't gold, the boys had quite a ceremony completing this little railroad at an Allied base in the South Pacific. They call their one and only train the ***Guadalcanal, Bougainville & Tokyo Express***

RESCUED from a scrap pile, the former Venice Miniature Railroad is now operating at South El Monte, Calif.

line. Mr. Smith spent about a year of his spare time rehabilitating the tiny engine and cars and relaying the track, with the result that the old "streak o' rust" is now doing business again at Five Points and Garvey Blvd., South El Monte, Calif., a block and a half from the Southern Pacific's main stem into Los Angeles from the east. This news and the photos come from C. T. Steeb, Southern Hotel, San Bernardino, Calif.

The Tom Thumb railroad operates only Saturdays and Sundays. A ride on this train is a popular week-end divertissement. On the other days, Mr. Smith, who is a combination of brass collar and one-man crew, works in a defense plant, but finds time to make little improvements on his rail property. Right now he is planning a passenger depot. The engine, a real live-steamer, was built in an iron foundry on N. Main St., Los Angeles, and weighs 4½ tons. The cars weigh 1½ tons each and the whole train is equipped with air-brakes.

Smith is especially proud of his engine, which is a Prairie (2-6-2) type oil-burner, having a water-tube boiler and whistle. She can knock off 40 m.p.h., but is normally restricted to 25 m.p.h. Rail is 12-pound steel, except on the depot spur, which is 8-pound. Fare is a dime, plus the 10 percent Federal amusement tax which we still pay as a heritage of the *first* World War.

* * *

ONE-MAN RAILROAD. In November '42 *Railroad Magazine* published three photos of my miniature pike here. Since then I have received scores of letters about it, and through this magazine I have sold my steam engine to someone in Ohio and my rails to a party in North Carolina. It seemed then that I was through with miniature railroading. But now I am asked to go to an-

other Texas city and look over a proposed route which would be used not only as an amusement road but for real transportation as well. I can't tell you how thankful I am to *Railroad Magazine* for opening this new field to me.—E. C. PARNELL, 2002 Gilbert St., Beaumont, Texas.

* * *

NARROW-GAGE. The sun continues to set on slim-gage lines, the latest being the old Waynesburg & Washington in Pennsylvania, a Pennsy branch, which is now being standard-gaged. The W&W served valiantly during the first World War, using a steam locomotive. In 1929 it suspended passenger service. Two years later it gave up steam-powered freight. Since then it has run infrequent motorized car service, which rather recently had been stepped up to haul shipments of Greene County cream and other merchandise that proved too much for the gas-curtailed motor-truck lines. Finally a heavy rain washed out a trestle, and the motorized care ceased operation.

These facts come from Earle R. Forrest, *The Observer,* Washington, Pa.; Captain Alex. L. H. Darragh, CE-Res., Ord. Dept., Normoyle Ordnance Depot, San Antonio, Texas, and from James W. Swart, Waynesburg, Pa.

James ran the last freight over the W&W on July 9th, 1932, with J. L. Shull as conductor, using a steam locomotive. Later he ran the motorized car for some time but is now firing on the Pennsy's Panhandle Division. The old W&W locomotive, cleaned up, was exhibited by the PRR at the New York World's Fair. Captain Darragh thinks she is now stored in the company's back-shop at Canton, Ohio.

* * *

LOCOMOTIVE NAMES. Thomas T. Taber, founder of the Railroadians of America, wrote the other day to the President of a Class 1 road protesting against the removal of names from some of their passenger engines. Tom pointed out such action tends to destroy the locomotives' personality which appeals to many persons. He cited

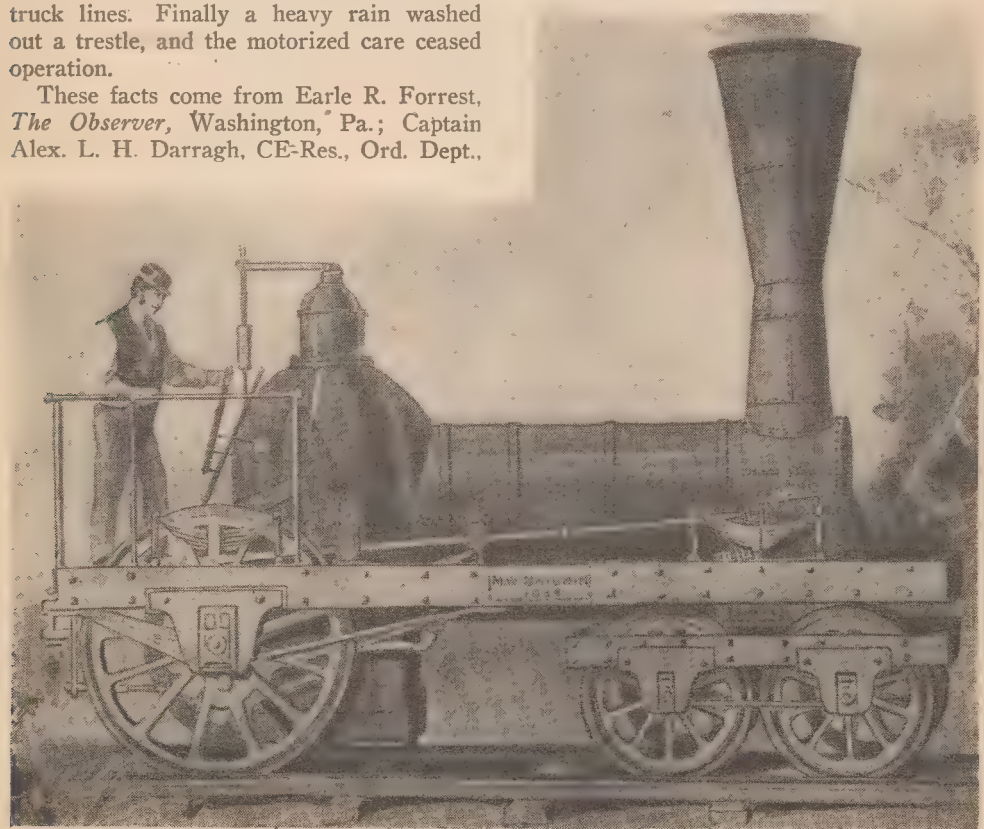


Photo from Milton Bernstein, Chairman, Railroadians' Museum Committee

MATHIAS BALDWIN'S *The Miller*, built for the Charleston & Hamburg Railroad in 1834, had a swivelling lead truck

REVERSE shaft lever on Mason engines straddled boiler through the bell frame casting. Here's No. 8 of the Boston, Revere Beach & Lynn at East Lynn, Mass.

the fact that British locomotives continue to carry names and even today the companies give new names to engines when placing them in service.

To this the rail chief answered: "A very large number of people disagree with these conclusions. . . . I also have traveled extensively in England. Railway and travel conditions there are quite different from here, and are comparable only to a limited extent. My own belief is that you could take the names off the engines in England and few Englishmen would notice it."

How about it, British readers? Does this American executive correctly gage public sentiment in your country?

Tom tells us: "It is tragic that some of our railroads, which are now enjoying the heaviest traffic in history, are so short-sighted that they cannot see that now is the time to start building up goodwill, securing friends and public interest in advance of the time when they will again be crying for business and wailing over competition. Just read the advs. of the air lines. Compare them with rail advs. and then decide which mode of transportation is giving more thought to post-war business."

We'd like to get reader comments. Is it good publicity to name certain classes of locomotives? Do you favor a more widespread naming of locomotives?

* * *

WRITING from Iran (Persia), where he is stationed with the American armed forces, Sgt. Robert W. Richardson reports having just received the July and August issues of *Railroad Magazine* and comments as follows on an item about trucks hauling locomotives *(July '43, page 148)*:

"The last two engines of the Wiscasset, Waterville & Farmington, a 2-foot-gage road in Maine, now abandoned, were hauled in this manner from Gardiner to Wiscasset from the old Kennebec Central, also 2-foot, abandoned. And I've seen construction company locos hauled by trucks."

* * *

"ONE good thing about the war," writes F. H. Sutton, a railroader for 28 years, 1400 S. Kenmore, Los Angeles 6, Calif., "is that it has put the boomer back in harness. Many of these old-timers are doing a good job, too. And the war has brought forth another sight not seen for many years. I refer to young fellows firing crack passenger runs. When I first came here to work on the Santa Fe I looked at them a bit wistfully and recalled that during the first World War I also fired the best passenger run on my division, with just two years' rights."

* * *

TRAFFIC conditions were terrible in Bridgeport, Conn., during the first World War, when I began working as motorman on the streetcars there. Model T Ford "jitneys" ran around the left side of our trolley cars and stopped in front of them to steal our passengers. Every once in a while, when the rails were slippery, the jitney drivers tried to stop us a little too quick-

Photo by David McQueen, 132 S. Drive, Ft. Garry, Winnipeg, Manitoba

CANADIAN NATIONAL switchers blast cumulus exhausts against a sullen sky at Winnipeg's Ft. Rouge Yards

ly, and got bumped. One morning a motorman became angry and chased a jitney halfway through town, hammering his gong, just a foot or two behind the Ford. He made about 30 m.p.h. Neither he nor the jitney driver stopped for passengers on that trip.

At night when the last streetcars were coming in, the power went up and we would roll at 45 m.p.h. or better. I'll never forget the time a jitney looped around one of the cars running at high speed on South Main Street. It was thrown against a brick wall, clear across the street.

When we had 3 or 4 inches of snow it was a nightmare. The law allowed drivers of delivery trucks and wagons to park in the streetcar tracks for 5 minutes, and nearly all of them took the full time. It was common for drivers, after finishing their delivery, to stand in the doorway, watch in hand and wait for the 5 minutes to elapse before coming out. One motorman was held up by a piewagon. He got out, helped himself to a pie, and sat down on his fender to eat. The driver came out in a hurry and yelled:

"What in hell are you doing?"

"I'm eating a pie," the trolley employe said calmly, "and if you don't soon get your wagon off the track I'll eat another."

The pie-man took the hint. But I didn't stay long on the Bridgeport job. Since my father was a New York Central machinist, I was interested in steam railroading also; so I got a job firing—under unusual circumstances. Tell you about it later.—RAY NICHOLLS, R.D. 3, Oneonta, N. Y.

(Editor's Note: Ray's experiences will be continued in this department next month.)

* * *

RAIL FAMILIES. We learn from 16-year-old Genevieve Lewis, Rolette, N.D., that the Soo Line's Winnipeg Division boasts this one: O. A. Paulson, agent, and his wife, caretaker, both of Rolette; and four sons, all agents or relief agents—Wallace at Fordville, Royce at Norma, Maurice at Baker, and Lester, now in the Army. On top of this, their son-in-law, Maurice Hoffas, is agent at Bejou, while Mrs. Paulson's nephew, Leroy Ingebretson, Maurice Hoffas's brother Charley and several cousins also are employed on the Winnipeg Division.

Another rail group, Genevieve reports, is the Suprey family. Three generations work for the Soo Line: Tom Suprey, his son Ed, and his grandson Leslie.

TRAIN ORDERS were delivered to the crew by hand when W. J. Huffman began working for the Soo Line in 1902. He writes: "How did I do it? Well, the orders at that time were on heavy paper. I would fold the order lengthwise once, then again, making it a little over 1½ inches wide. This I would place on my palm, with fingers and thumb parallel and straight; then I'd squeeze the ball of the thumb toward the palm. This pinched the strip of paper enough to keep it from falling off, and I'd give it to the shack or tallowpot who came down on the engine step and grasped my hand lightly enough to slip over it and take the order or message. Simple, but it worked. The main objection, of course, was that the op had to stand close to the locomotive."

Huffman is now living at 2001 S. Fillmore St., Denver 10, Colo. He was a member of the Order of Railroad Telegraphers in 1902 when he hired out as op on the Soo Line.

He was sent to Escanaba, Mich., to work nights on a twelve-hour trick, while the agent, Myron C. Linch, handled the twelve-hour day trick. Together the two men worked the clock around, 365 days a year. Huffman's next assignment was as agent at Lehigh, Wis., at $45 a month. Since there was no night op at Lehigh he was called so often that he felt like a country doctor, except he was never paid for overtime.

"My next more was to Brantwood, Wis., as agent," he says. "Some years before there had been a forest fire south of the depot, so all you could see was old fallen timber and upturned roots. Very cheerful. My regular hours were from 7 a.m. to 7 p.m. but I often had to be on the job from 6 a.m. to 9 p.m. to take care of a tie-loading train. Besides Brantwood, I had five or six blind stations to look after at the same time."

The Soo Line was then still following, to a large extent, Canadian Pacific practices and forms. For one thing, train order blanks were not tissues, but were ordinary paper carbonized on the back. Not liking the two-room shack he had to live in at Brantwood and fearing that "if I stayed, the section crew would have to take me to work some nice cold morning with a pair of ice tongs," our correspondent quit the Soo Line in December, 1903, to work on a road where living conditions were better.

CUTAWAY DIAGRAM of 150-ton wrecking crane in your "Big Hook" article *(Nov. '43)* presumably was intended to represent a Bucyrus-Erie crane, not *Erie* as you stated. What about running an article on the history of railroad construction equipment?—CARL J. BACHMANN, R.F.D. 2, Box 438, Phoenix, Ariz.

(Editor's Note: We'd like to get comments from readers as to whether or not the subject interests them.)

* * *

MUCH as I enjoyed the "Big Hook" article, I find that the drawing on pages 8-9 represents an operation that would be considered unsafe, at least here on the Illinois Central, because a lift is never made until all crew members are in the clear. For instance, if the cable should break it would hit the man standing near the smokebox. Also, a crew member should be watching the "dogs" on the blind side. I've seen them turn over even when the outrigging was in place and well blocked. The "dogs" shown in the drawing are not even connected to the rail.—C. W. WITBECK, Box 2501, W. Jackson, Miss.

* * *

WANTED: Anecdotes and brief personal experiences based on Grand Central Terminal here. Send 'em to Freeman H. Hubbard, Research Editor, Popular Publications, Inc., 205 E. 42nd St., New York City 17.

* * *

"CORRECTIONS" sent in by readers are wrong so often that we now hesitate to use such material. A thorough search generally reveals that the statement we originally printed is correct. For instance, facts supplied to us the other day by Elwin K. Heath, Barre, Vt., and others indicate that some of Sgt. E. D. Jones's alleged corrections, published in our December issue, pages 156-7, are themselves erroneous.

Railroad Magazine is edited with great care. We are proud of our high percentage of accuracy. Most of our contents is checked and double-checked in advance of publication. Even so, we do not claim to be infallible. When a reader does find what he thinks is a mistake in the magazine we'd appreciate him telling us about it—with proof.

Santa Fe photo on pages 62-63 of our November issue shows not the *Super Chief* but probably the *Kansas Cityan*, opines Leon H. Gould, 4326 W. Adams Street, Chicago 24, basing his guess on the RPO car, of which he says the *Super Chief* had none in its consist. Leon is a railway postal clerk on the *Kansas Cityan*.

Our November cover shows the Reading-Jersey Central *Queen of the Valley*, with an imaginary background. This train is usually hauled by a CNJ Pacific type, comments George M. Hart, author of "Cabs" (Oct. '43), Box 237, George School, Pa.

Reading inspection car No. 100, pictured in October issue, page 22, reminds Gus W. Adams, Providence, R. I., of the New Haven's official car *Naugatuck*, which he often saw in bygone days.

Because he's a CMStP&P fan, Jim Scribbins of 1609-A W. Center St., Milwaukee, Wis., enjoyed especially two things in our December issue: LeRoy Palmer's "Memories of the Old St. Paul" and the Diesel-powered freight shot on page 126. Jim says the photo was taken in Nov. '41, east of Calder, Idaho, on engine No. 40's maiden trip, the hoghead being Lee Thorne.

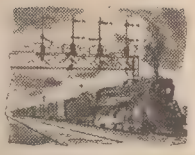
* * *

FINALLY, we come to the results of our monthly "straw vote." As you know, readers indicate which stories, articles, departments and photos they like best in the magazine. Some clip the Reader's Choice coupon *(page 145)*; others write the choice on cards or letters. The purpose of this balloting is to assist the editorial crew in assembling material for future issues. Here is the popularity list for December, lined up according to the number of votes received:

1. True Tales of the Rails
2. Rails Across Blue Ridge, *Monroe*
3. On the Spot
4. Electric Lines, *Maguire*
5. Light of the Lantern
6. Blue Ice, *Parry*
7. Double-Enders, *Fisher*
8. The Old St. Paul, *Palmer*
9. Engine Pictures, *Schmid*
10. Locomotive of the Month
11. Railroad Camera Club
12. Wanna Be a Switchman, *Gordon*
13. The Rolling Stone, *Roach*
14. Along the Iron Pike, *Easley*

A tally of reader votes shows that December's most popular photo was that of the Diesel-powered Milwaukee train on page 126, followed by the pictures on pages 42, 77, 20-21 and 147, in the order listed.

"Who was it said, Democracy is inefficient"?



Everybody knows who —and it was one of the worst of his wrong guesses — as many things are proving.

One proof is the record of the American railroads.

In the year just ended, they handled a volume of traffic which dwarfs anything in the history of transportation.

And this job was done — not under the arrogant compulsion of dictatorship, but by voluntary cooperation in the finest American tradition.

There was first of all, the cooperation of railroad men and railroad companies with one another.

There was the surpassing cooperation of shippers and receivers of freight, who did their indispensable part in keeping freight cars on the move.

There was the helpful cooperation of government agencies with railroad management.

And there was, on top of all this, the cooperation of the Army and Navy—the greatest shippers in the world.

Without all these, the record would never have been possible.

And finally, there was the friendly and patient cooperation of the traveling public—which accepted the inconveniences, and sometimes the hardships, of wartime travel, with typical American good humor and good sense.

So far have we come together along the road to victory. The road ahead calls for still more effort, still closer cooperation, in getting the utmost transportation service out of our railroad plant.

And when the victory is won — as surely it shall be—it will have been won by free men, working together under the rules free men established for themselves—the thing we are fighting to preserve.

★ BUY MORE WAR BONDS ★

ASSOCIATION OF AMERICAN RAILROADS

ALL UNITED FOR VICTORY

South Carolina Railroad

AT NO TIME in history have the railroads of any section been hit harder than in our own South near the end of the Civil War. True, there were no "block busters" then—no bombing raids from the air—but in most of Europe today such damage is quickly repaired and train service is restored, whereas the Confederates nearly eighty years ago found it impossible to resume operation of roads destroyed by General Sherman's troops.

The situation is covered dramatically in a book which has come to our attention, *Centennial History of the South Carolina Railroad,* by Samuel M. Derrick. This comprehensive volume, 335 pages, with 52 illustrations, was published in 1930 to sell at $5 but copies of it may now be obtained at $3 from Gittman's Book Shop, Columbia, S.C.

In 1860, before Fort Sumter was fired on, the author tells us, receipts of the South Carolina Railroad totaled about $1,500,000. The war brought three years of illusive prosperity. Receipts for 1864 reached the unprecedented total of more than six millions. Dividends of 16 percent were paid to stockholders! But this business was done in Confederate currency; nobody got permanently rich from it—the company itself didn't.

"Obviously, the railroad was of tremendous importance to the Confederate forces," Derrick writes, "and for that reason it was to be expected that the Federal army would destroy it in the march from Savannah to Columbus. . . . As soon as it was captured, details of men were set to work to tear up the rails, burn the ties and twist the bars. . . . So complete was the destruction that when the officers of the company resumed control on June 19th, 1865, the transportation facilities were reduced to 4 locomotives, 5 passenger and baggage cars, and 36 freight cars. All of these required repairs before they could be relied upon to meet the demands of service."

An itemized list of losses sustained by the SCRR as a result of the war included: "Negroes, 111, emancipated, $190,973." Among the illuminating appendices to Derrick's book is a compilation of slaves owned by the road as of December 31st, 1859, ninety in all, with the date of purchase, name of seller, name of slave and cost of each. Prices ranged from $400 for a man named Jack to $1500 for another with the same name. One poor fellow, known as Hard-times Gadsden, was bought for $907.12. Just where the odd 12 cents came in, the list does not reveal.

"Naturally," says Derrick, "the company owned a number of Negro slaves. This was thought necessary on account of the extreme difficulty and expensiveness of hiring suitable laborers."

Much of the line was in fact built by slave labor hired from plantations enroute. This was tried as an experiment. The author states: "The experiment was successful. Engineers reported that the slave did fully as much work as the white laborer usually employed at such work."

Directors of the South Carolina Railroad, at the suggestion of their president, went on record in favor of "running freight trains with black engineers, under the management and control of a white conductor . . . as soon as practicable." That ruling

Statement of the ownership, management, circulation, etc., required by the Acts of Congress of August 24, 1912, and March 3, 1933, of Railroad Magazine, published monthly at Chicago, Illinois, for October 1, 1943. State of New York, county of New York, ss. Before me, a Notary Public in and for the State and county aforesaid, personally appeared Harold S. Goldsmith, who having been duly sworn according to law, deposes and says that he is the Business Manager of Railroad Magazine, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, as amended by the Act of March 3, 1933, embodied in section 537, Postal Laws and Regulations, printed on the reverse of this form, to wit: 1. That the names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, Popular Publications, Inc., 205 E. 42nd St., New York, N. Y. Editor, Henry B. Comstock, 205 East 42nd Street, New York, N. Y. Managing Editor, none. Business Manager, Harold S. Goldsmith, 205 East 42nd Street, New York, N. Y. 2. That the owner is: Popular Publications, Inc., 205 East 42nd Street, New York, N. Y., Henry Steeger, 205 East 42nd Street, New York, N. Y., Harold S. Goldsmith, 205 East 42nd Street, New York, N. Y. 3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: none. 4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner, and this affiant has no reason to believe that any other person, association, or corporation has any interest, direct or indirect, in the said stock, bonds, or other securities than as so stated by him. Harold S. Goldsmith, Business Manager. Sworn to and subscribed before me this 28th day of September 1943. Eva M. Walker, Notary Public, New York County Clerk's No. 18, Register's No. 4W359 (My commission expires March 30, 1944.) [Seal]—Form 3526—Ed. 1933.

was adopted September 20th, 1836. It is the only instance we know of where a Southern railroad authorized the use of colored hoggers. But no evidence is adduced to show that Negroes were ever actually employed on the SCRR in that capacity.

Derrick brings out an interesting point: "As regards damages to property and the loss of goods in transit, the directors were in some cases averse to making any compensation."

Offsetting this penurious policy, we learn that the same directors showed a "liberal and altruistic spirit" at the time of a yellow fever epidemic in Charleston. The board authorized free train rides to poverty-stricken persons leaving the city to escape the plague and seek employment elsewhere.

And so it goes. Derrick's *Centennial History of the South Carolina Railroad* is rich with anecdotes, facts and reference material. It has a wide variety of illustrations, photos, old prints, maps, etc. The account of post-war restoration is an epic in itself. Considerable space, with photos, is devoted to the subject of motive power.

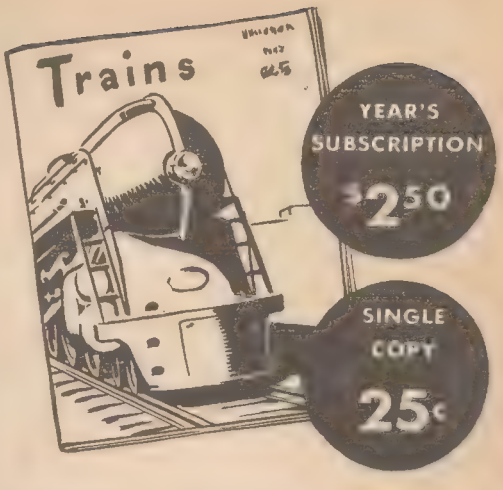
A copy of the book was sent to us by Guy E. Mauldin, Assistant Secretary of the Southern Railway Co., which took over the road in 1902, to correct a curious error in SCRR engine-picture captions. Our August '43 issue carried a picture of the *Best Friend of Charleston* as rebuilt *after* her famous boiler explosion, and last November we showed her *before* the fatal accident; but our caption lines were strangely reversed.

If we had not made this mistake we might never have seen a copy of Derrick's fascinating book, which would have been our loss.

History of the 4-4-2

ATLANTIC TYPE LOCOMOTIVES are discussed in a detailed treatise by Paul T. Warner, Assistant to the Chief Engineer, Baldwin Locomotive Works, in *Bulletin 62* of The Railway & Locomotive Historical Society, Inc.

Mr. Warner has made a lifelong study of Baldwin engines, old and new. He points out that the first locomotives to which the name "Atlantic type" was applied were built by his company in 1894 for the Atlantic Coast Line. Next year the same builder turned out similar power for the Concord &



TRAINS is the immensely successful "glossy paper" magazine about railroads and railroad travel. It appeals to anyone who has ever thrilled to the chuffing and puffing as the 5:15 pulls out of town or who gets nostalgic at the sound of engine whistles in the night. The photos are superb, the maps accurate and clear, the articles well written. You'll like TRAINS, just as thousands of others have liked it.

ARTICLES in TRAINS are never too technical—always mindful of the fact that the average man who loves railroads is no trained mechanical or civil engineer but that he does want the accurate facts simply told.

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CONTENTS are exclusively fact articles. Railroad fans like locomotives and this we do not lose sight of. TRAINS also tells about other parts of the railroad mechanism, signals, tracks, bridges, tunnels, stations, cars and about the way this railroad mechanism is operated to produce transportation.

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Montreal, the Katy and the Georgia. And in 1896 Baldwin constructed Atlantics for the Philadelphia & Reading (Atlantic City RR.), the Jersey Central, the CM&StP and the Lehigh Valley. Except for the Milwaukee jobs, all were hard-coal burners, with wide fireboxes and central cabs.

Thus the 4-4-2 type came into being. The author analyzes this type, with specifications, photos, etc.; while Charles E. Fisher, president of the Society, raises the point as to whether or not Atlantics will ever stage a comeback.

Besides Warner's article, *Bulletin 62* carries some choice data on little-known early locomotives, by Mr. Fisher; also write-ups of the Carlton & Coast, the Bath & Hammondsport and the Pittsburg, Shawmut & Northern, as well as other reference material —95 pages in all, plus many pictures. This *Bulletin* may be obtained from the R&LHS ($1 to members, $2 to non-members), the address being Baker Library, Harvard Business School, Boston, Mass.

Flag Stops

ANOTHER R&LHS publication is an interesting 24-page pamphlet, *The Western New York & Pennsylvania Railway*, by Norman J. Perrin, 4523 Arabia Ave., Baltimore, Md. This brochure includes a chronology of the many short lines that eventually formed the WNY&P (now a part of the Pennsy system), also a motive-power roster and map. It sells at 50 cents a copy.

* * *

RAILFANS who like to frame pictures would be interested in a couple of pleasing watercolors by Gil Reid, 9x12 inches on heavy paper 12½x14, one showing a locomotive scene, the other a freight from the caboose end, which are being issued at $1 each by Kalmbach Publishing Co., 1029 N. 7th St., Milwaukee, Wis.

* * *

PULLMAN COMPANY'S handling of serious wartime problems and its post-war plans will be discussed with authority by George Kelly, the company's vice president, at a meeting of the Railroad Enthusiasts, New York Division, to be held at 7:45 p.m., Friday January 28th in Room 2728, Grand Central Terminal, N. Y. City. The public is invited to this timely lecture, free.

* * *

JUDGING from the number of entries in the Railroadians' essay contest, railroaders and railfans alike have plenty to say about long-range plans for meeting post-war transport competition. Judges Henry, Kalmbach, Comstock, and Taber are still balloting, and the winners will be announced next month.

Railroad Camera Club

ITEMS in this section are published free, in good faith, but without guarantee. Write on a separate sheet or card containing name and address. Do not bury your *Switch List* entry in a letter dealing with other subjects.

Write very plainly. We are not responsible for errors caused by poor handwriting.

Redball handling is given to each item we get the first six days of each month, if accompanied by a Reader's Choice coupon (clipped from page 145 or home-made).

Use these abbreviations: *cond.*, condition; *ea.*, each; *elec.*, electric; *eng.*, engine; *env.*, envelope; *esp.*, especially; *incl.*, including; *exc.*, except; *info.*, information; *mag.*, magazine; *n.g.*, narrow-gage; *negs.*, negatives; *pix.*, photos; *p.c.*, postcard; *pref.*, preferably; *st.*, street; *tr.*, train; *trfs.*, transfers.

The term *tts.* refers to public timetables—unless preceded by *emp.*, when it means employes' timetables.

Use these photo sizes: 127—1⅝x2½ inches; 117—2¼x2¼; 130—2⅞x4⅞; 118 or 124—3¼x4¼; 122 or pc.—3½x5½; 116—2½x4¼; 616 same as 116 on thin spool; 120—2¼x3¼.

(R) indicates desire to buy, sell or swap back issues of *Railroad Magazine* or its predecessors. (Specify magazines' condition.)

(*) indicates juicefan appeal.

When writing to anyone listed here, enclose a stamped env. for reply. If you do not get an answer, it may be because the man was called for military service.

* * *

PACIFIC ELECTRIC PHOTO. Through an oversight, we neglected to give credit to Cpl. Ira Swett, formerly of 1414 S. Westmoreland Ave., Los Angeles, for supplying the lead photo in our Pacific Electric story last month. This rare shot, taken by Ira's grandfather, shows PE and Los Angeles Ry. cars in 1903.

The Switch List

V B. ADAM, 634 So. Nelson Ave., Kankakee, Ill., wants *Off. Guide* between years '06 and '15.

J. WM. BARNES, Box 263, Southbridge, Mass., has list of over 1600 subjects incl. about 400 roads, many early locos on glossy p.c., $1 doz.; list, 5c.

Pvt. FREDERICK BENNETT, 11094843, 4436 ASTP, Bks. 4, Co. 2, The Citadel, Charleston, S. C., will buy any size pix B&H or B&SR.

(*)Pfc. DICK BIERMANN, 419th Base Headquarters, Air Base Squadron, Army Air Base, Dyersburg, Tenn., will buy size 116 camera, also same size negs., any steam or juice line. Write first.

(*)JOHN BRUNNER, 571 Slicott St., Buffalo, N. Y., trades IRC tokens and trfs. for those of other cities.

(*)MALCOLM F. BUSTIN, Box 112, Cochituate, Mass., wants any size pix and negs. of foreign elec. lines, esp. Mexico City; also pix of RGS rail-gas Buggies and similar eqpmt. on other roads.

RICHARD M. CRANDALL, Malden, W. Va., wants

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pix of engines, trains, cars, coaches; also tts., tickets, tr. orders, passes.

(*)Pvt. J. T. CUNNINGHAM, Co. A, 821 TD Bn., Camp Breckinridge, Ky., will buy size 116 pix, info., etc. of any. interurban in Indiana.

(R)T/S JAMES E. DAWSON, Hq. Co. 846th T. D. Br., A.S.N. 34551664, Camp Swift, Texas, will buy *Railroad Magazine*, Dec. '38, May, June, July and Aug. '37, June '38 and Sept., Oct., Nov. '38.

(*)GEO. P. DEAN, 90 Godin Blvd., Mackayville, Que., Can., will send pix of CNR station, Montreal, and sight-seeing st. car, p.c. size, for 10c ea. plus postage; or will trade for loco or st. car pix.

J. J. FARRIGAN, Box 57, c/o Farm Office, Worcester, Mass., wants large '44 calendar, any Western road.

(R)H. F. FIEDLER, 1310 Prospect Ave., St. Joseph, Mo., wants to buy Sept. '36 and July '39 *Railroad Magazine.*

(*)GERRY GARRETT, 1206 S. Rockford, Tulsa, Okla., trades Tulsa and St. Louis bus trfs. Wants info. on all steam and juice lines. *(Editor asks: What kind of info., Gerry?)*

TED GAY, 156 Van Buren Ave., Teaneck, N. J., wants Jan. and Aug. '43 *Trains*, good cond., for which he offers 12 or more P.C. loco pix, big or small roads or assorted.

(R)AL GAZAY, Jr., 1014-B Pine St., Seattle 1, Wash., will buy SP pix of eng. prior to '17, also Calif. Val. div. eng. of Santa Fe; wants copies of *Santa Fe Magazine* and *SP Bulletin* prior to '41 and *Railroad Man's Magazine* before 1919.

GERRARD GRAHAM, 2439 Funston Ave., San Francisco 3, Calif., wishes to contact someone selling Seattle and Tacoma negs. or will trade local negs.

FRANCIS GSCHWIND, Route 3, Callaway, Neb., wants pix, size 116 or larger, of UP 107, 119, 120, 205, 400. Write first.

S. P. GUTHRIE, Cold Spring, Ky., wants size 116, 120 or p.c. pix or negs. of Colo. Sp. & Cripple Creek, Colo. Mid., Uintah, Florence & CC., Crystal River & SJ, Arg. & Grays Peak, scenes, locos, cars. Also *Off. Guide* '05, '08, '11, and pix of any n.g. road.

(*)Pvt. HAROLD J. HARGRAVES, Med. Det., 31209025, Oliver General Hospital, Augusta, Ga., buys pix of New Eng. open and closed trolleys.

(R)CLIFFORD HAYES, 452 Finley St., Auburn, Calif., wants Feb. '43 and all '41 *Railroad Magazine.*

(R)DEAN HALE, Box 135, Blackwell, Okla., wants *Railroad Magazine* '30-'43; all *Trains; Ry. Industry Booklet, Off. Guide* '42 or '43, *Car Builders Cyclopedia* '42. Hopes to have new paper *Midwestern Ry. Fan*, out Jan. 2.

(*)JACK HEDDEN, 654 Arbutus St., Akron 7, O., will buy 116 ¾-view negs. of PE Mt. Lowe incline cars, other PE eqpt., also some LARy cars. Write for details.

(R)CECIL HIATT, 214 Moore St., Thomasville, N. C., will buy negs. of HPT&DRR, esp. rolling stock; Winston-Salem southbound, Atl. & Yadkin; also *Railroad Magazines*, Jan. '35 to Dec. '38. Prefers all 48 mags. from same person.

(*)WALLACE HIGGINS, 47 Doris Parkway, Westfield, N. J., trades trfs.; wants old-style 3rd Ave. system, has some of these to trade. Also wants tts. and emp. tts., info., pix of all Alaska and Yukon rys. Wants *Trains* before March '42. Will swap *Off. Guide* Jan. or Feb. '42 for one of 1930.

(R)E. L. HOBSON, 66 Lake Drive, Indian Orchard, Mass., offers *Railroad Magazine*, unclipped, July-Dec. '41; make offer.

MERLIN HUTSELL, 1803 East Chestnut, Springfield,

Mo., will buy loco pix, any size, Frisco and other roads. Has Frisco loco roster for sale or trade.

(R)DAVID JOHNS, Box 127, Prince Rupert, B.C., Canada, will buy *Railroad Magazine*, good cond., with covers, all issues from Feb. '35 to Oct. '41.

(*)ROLAND KUPINSKY, 2707 Morris Ave., New York City 58, swaps trfs.; has steam and airline tts. to trade for elec. tts., trfs., pix.

(*)TOM LANGAN, 1611 S. Dela. Pl., Tulsa 4, Okla., trades pix of 14 Ill.-Iowa PWR, 10 Sand Springs Ry., 15 Oklahoma Ry., 3 Sapulpa Union. Also Okla. Ry. and St. L. County bus trfs. Wants juice and short-line pix, also Frisco shots.

JOHN LAUERMAN, 413 Nebraska Ave., York, Neb., wants p.c. pix of L&A *Southern Belle*, L&N *Pan Amer.*, NYNH&H *Speed Witch;* will trade up to 10 p.c. streamline and steam pix for ea. one.

KLINE LIMBERT, Box 1528, Westwood, Calif., wants p.c. pix of depots in Rutland, Vt.; Fitzgerald, Ga.; Alexandria, Minn.; Battle Creek, Mich.; St. Petersburg, Fla.; Tyler, Texas; Muskogee, Okla.; Roanoke, Va.

(R)J. L. MATER, 334 Hamilton St., Harrisburg, Pa., has 2 Pennsy lanterns; 275 page *Car Man's Helper*, 1920, by Christie; *Modelmaker*, 1934-'36; *Model Builders* and *Life of Gen. Grant*, by Headley. Will trade any for *Railroad Magazine*. Write first.

(*)A/c MERLE LEE MEDDOWS, 87th Trig Gp 43-18-6 HAAF, Hondo, Texas, trades st. car tokens.

FRANK Y. MERRIMAN, 1004 N. Kedvale Ave., Chicago 51, Ill., wants *Locomotive Text*, 375 pages, edited and published by Fred McArdle '08-'09. Will send tr. order of C&NW Galena div. to anyone enclosing stamped env., as long as supply lasts.

(*)M. A. MINER, 6923 Miramonte Blvd., Los Angeles 1, Calif., has resumed trading juice negs., size 116, and trfs. Wants pix of patriotically painted cars. Asks former correspondents to write again.

TOM MOHR, 5237 N. Moody Ave., Chicago, trades 2 C&NW tr. orders for pix of C&NW eng. 2902 with specifications.

Pfc. GEO. F. MONAHAN, 10 Geny Ave., South Portland 7, Maine, will pay original price for Vol. 1. of *Trains*, good cond.

(*)WALTER P. MURPHY, 1932 Kenilworth Avenue, Wilmette, Ill., wants pix of Chicago surface lines work cars, wreck trucks, wreck crew at work, wrecks, shops, car barns. Will also buy historical booklets and mag. on elec. lines.

(R)CURTISS NELSON, 964 E. Rose Ave., St. Paul 6, Minn., wants Oct. '32 *Railroad Magazine*. Write for list of things he has to trade Will sell book *Along the Iron Trail*, good cond.

H. G. NELSON, 224 Rock Island St., Peoria, Ill., will sell *Locomotive Engineers Journals* for best cash offer: Oct. 1902; Nov., 1903; all 1904 except Jan., Feb., March, Dec.; all 1905 except July; all except Aug. 1906, 1907, 1909.

L. D. O'CONNOR, 73½ Oak St., Plattsburg, N. Y., will sell D&H pix of any type, D&H vacation books, blotters, tts, etc. Wants pix and info. on Montreal Tramway Co.

HAROLD OLSEN, 32863547, A.P.O. 184, c/o Postmaster, Los Angeles, Calif., buys Birney car pix from all short lines in U.S. and Canada.

RICHARD PEDLER, 814 Sixth St., Muskegon Heights, Muskegon, Mich., buys Baldwin builder's pix of modern steam locos, good cond.

L. K. PENNINGROTH, 2011 Hebert St., St. Louis 15, Mo., will buy any pic of CGW *Red Bird* loco 916.

(*)CHAS. E. PHEASANT, 1238 E. 138th Ave., Denver 6, Colo., buys size 616 trolley pix or negs., esp. patriotic trolleys. Also trades tokens and trolley trfs. for those of other cities, incl foreign. Write first.

(R)JAMES PIERSALL, 1031 N. Beville Ave., Indianapolis, will trade *Railroad Magazine*, Feb., Oct., Nov., Dec. '38, for Sept. '36 and March '38; all good cond.

(R) CHUCK POWELL, 116 S. Virgil Ave., Los Angeles 4, Calif., will swap recent issues *Railroad Magazine* and other rr. literature for foreign pix.

(*)BILL REDDY, 21 Chamberlain Drive, Buffalo 10, N. Y., will buy motorman's and conductor's caps.

(*)Sgt. WM. REEVES, 8514 Latona Ave., Seattle, Wash., will buy any size pix of st. cars. Will sell or trade pix of Seattle and Tacoma, Sioux City, Vancouver, Victoria. Also swaps trfs.

J. R. REID, 358 Woods Ave., S.W., Roanoke 16, Va., will sell size 116 pix of Mallets and other locos on S.E. roads, esp. N&W, C&O, Sou, MoP, Frisco; 32 for $1; list and sample, 10c.

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BROOKS COMPANY, 159-G State St., Marshall, Mich.

LEROY P. REIFEIN, 1213 Elm Ave., Brooklyn, N. Y., will buy PRR Pitt. div. emp. tts. and Pennsy rulebook; make offer.

(R)W. ROBBINS, 1313 N. John St., Palestine, Texas, has 75 back copies of *Railroad Magazine* for sale. Also emp. tts and RPO's to swap for U.S. stamps or annual passes. Will sell or trade old waybills, bills of lading, *Off. Guides*, several *Eqpmt. Registers*, old tr. orders, trip passes, card passes. Send stamp for list.

(*)Lt. GEO. ROUSH, EPAAF, Eagle Pass, Texas, buys or trades 8 mm. movie films of st. cars and interurbans. Must be in focus, fairly steady, not all scratches. He has films of Texas Elec., Dallas st. cars, CR&IC, North Shore, South Shore, IC, IT, and New Haven, Conn., trolleys.

CHAS. A. ROWE, 218 W. Terrace St., E. Syracuse, N. Y., asks correspondents to have patience; their pix will be sent later.

J. M. de ROZARIO, 161 W. 12th St., New York City 11, wants B&O rulebook showing color-position signals. Offers LV rulebook. Also desires 1912 NYC&HR signal rulebook.

E. E. RUSSELL, 101 Conant St. Danvers, Mass., wants pix of B&M locos 3696 to '99.

C. E. RUTLEDGE, Brundidge, Ala., seeks to contact C. E. Helms, St. Mary's, O.

CLINTON SANDERFER, 3036 70th Ave., Port Arthur, Texas, offers cash for emp. tts., any road, esp. MoP and SP. Also wants MoP and SP pins.

(*)CHAS. D. SAVAGE, 754 Post St., San Francisco, has many size 116 pix of 1938 Bay Bridge electrification, also interurbans of Calif., Ore., Wash., Utah, Texas, to trade or sell at 5c ea. Wants 35 mm. Kodachromes of elec. rys.

L. SCARBOROUGH, 1027 Chestnut St., Hamilton, O., buys *Off. Guides* prior to 1910.

JIM SCRIBBINS, 1609A. W. Center St., Milwaukee 6, Wis., wants pix of Milw. Diesel frt. and class X-2 locos. Also frt. and pass. Diesels of SAL, Santa Fe, WP, etc.

WM. SHACKFORD, 2774 Lincoln Dr., San Bernardino, Calif., will trade AT&SF emp. tts. for those of ACL or L&N.

(*)BEN SHEPPARD, Jr. 2847 Woodbrook Ave., Baltimore 17, Md., wants trolley trfs., B&O tts. and emp. tts., also *B&O Magazines* for '43.

(R)CLARENCE W. SHAW, Box 16, Zachary, La., wants to buy *Railroad Magazine*, Dec. '36, July 39, Nov. '40, good cond.

(*)WALTER E. SOULE, 7 Court End Ave., Middleboro, Mass., trades trolley trfs. and buys pix of elec. lines and unusual or foreign types of steam power.

(R)DICK SMITH, 2234 W. 21st St., Los Angeles 7, Calif., will swap Dec. '41 *Railroad Magazine*, May '28, *Pop. Mech.* and Nov. '41 and Aug. '40 *Santa Fe Mag.* for Sept., Oct., and Nov. '38 *Railroad Magazine;* all good cond.

(R)EARL SPANGLER, Rte. 2, Jefferson, Wis., will pay 20c plus postage for May '43 *Railroad Magazine*, good cond.

Sgt. EARLE M. TOMME, Jr., A.S.N. 38033761, APO. 698, c/o Postmaster, New York, N. Y., wants to buy Railway and Locomotive Historical Society Bulletins '26, 37, 42 and special bulletin on history of SP locos.

(R)EUGENE T. WALKER, 516 Ely St., Alma, Mich., will sell 160 copies *Railroad Magazine*, '30 up to date, good cond., unclipped, with covers, 25c to 50c ea.

F. L. WARNE, 440 Riverside Drive, New York City 27, wants LV tts., Buffalo div., any date.

L. D. WEBSTER, 124 Tompkins St., Cortland, N. Y., has bound books, old dime novels and emp. tts. to swap for *Trains*, Dec. '41, '42 and '43, or old pennies.

(R)J. A. WEIGHTMAN, 1316 Que St., Sacramento 14, Calif., will sell *Railroad Magazine* at 50c ea.: Mar. 40, April, May, Aug. '41, Sept. '42.

(R)FRANK E. WHEDBEE, Seabrook, Md., has list of old *Railroad Magazines* to sell. Write for info.

J. C. WHITSETT, 1548 Rodgeway Drive, Glendale 2, Calif., will buy *Eqpmt. Register.*

LEONARD C. WOHLANDER, Ohio State San., Box 3, Mount Vernon, O., offers $1 for complete up-to-date Pennsy loco roster.

ARTHUR J. WOLMERING, 118 Ruggles St., Dunkirk, N. Y., wants to buy size 116 negs. of NYC, Pennsy, Erie, NYC&SL.

ED. WRIGHT, Harrington Park, N. J., will sell and trade used or outdated r.r. tickets. Write for list.

RONALD ZUADLIN, 7227 W. 2., 9th Ave., Gary, Ind., offers Sept. '43 *Off. Guide* for pix of Soo, PM or Wabash pass. trains.

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Stories, features and department I like best in the February '44 issue are:

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Model Trading Post

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(Continued on page 146)

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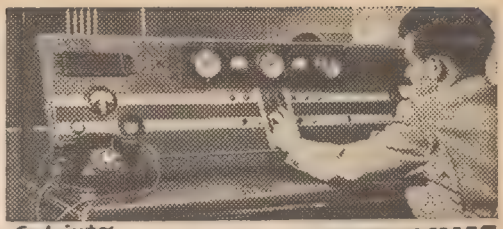

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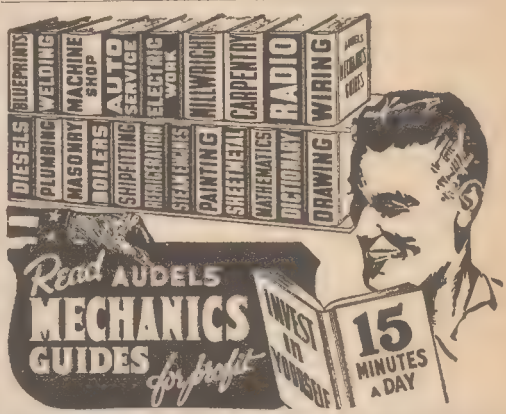

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FRANKLIN BARTLETT, 3013 Evergreen Ave., Baltimore, Md., will buy AF 3000-3001 pass. cars in original brown or green lithograph, AF 4-wh. lithographed frt. cars and Lionel '23 or '24 catalog.

CHAS. BAUNACH, Box 46, Kingston, N. J., will buy Lionel *City of Denver*, Penn 1668 with whistle, also Lionel 012 r. c. switches. State cond., price.

E. L. BLAIR, 1534 Silver Springs Blvd., Ocala, Fla., has list of model eqpmt. he'll sell; write for list.

BRUCE C. BOWDEN, 26 Sterling Road, Waltham, Mass., wants HO motor, also parts to make HO locos.

ROY C. CLARK, 805 Nevin Ave., Sewickley, Pa., wants loco valve setting model, Baker or Walschaert.

J. M. FESCO, 4309 Edenhurst Ave., Los Angeles 26, Calif., will buy 9-in. screw cutting, pref. South Bend lathe.

A. R. FELL, 1610 So. 29th St., Lincoln, Neb., buys old-time cast-iron pull trains.

KEN FRASER, Cookshire, Que., Canada, wants Lionel O gage or 027 eqpmt. and trains with auto. couplers.

E. M. GRANVILLE, Highland Park Pl., Rye, N. Y., will sell 16 trucks, O gage, AF, with auto. couplers and 3 pickup shoes; r.c. AF uncoupler track; Lionel 41 auto. accessories contractor; AF boxcar; 40 secs. AF str. and 18 secs. curved tracks; 2 prs. manual switches.

C. F. HARDER, 692-14th Ave., Paterson 4, N. J., will buy Lionel O gage eqpmt., 225 and 226 loco and tender, 2623 Pullmans, 2624 obs. car. Send list.

G. H. HARDY, 538-15th St., Oakland, Calif., wants tinplate and scale model catalogs.

Dr. GLEN HARRISON, 215 N. Sheridan Rd., Waukegan, Ill., will buy old tank car 1680, hand couplers, O gage dump car, hand couplers 659, 10 sections OS str. track, 20C curved track. Also wants A.F. train set 4011 or engine 561.

A. G. McDUFFIE, Box 382, Cloverdale, Calif., wants Gilbert and Mary 3/16 in. eqpmt., accessories, trsfs., trackage. Also Lionel loco 1684 and 027 enamel coaches to match, Hell Gate bridge, std. gage turntable, Hafner pass. platforms.

TED MOODY, 438 Franklin Ave., Amherst, O., will trade AF O gage crossover, good cond., for 12 AF O-gage str. track. Will also buy AF O-gage 4-6-2 NYC loco, good cond.

DON MOULTON, 322 Academy Ave., York, Neb., will buy 027 gage track and Marx 4-wh. cars with auto. couplers. Write, describing cars.

VIRGIL MUHKER, 3214 Randolph Ave., Oakland, Calif., will buy O-gage tinplate locos, cars, track, good cond.

RICHARD MEYERS, 74-11 Caldwell Ave., Maspeth, N. Y., has std.-gage eqpmt. to sell. Will buy 027 eqpmt. State price, cond.

TOM PARKS, 514 Princeton Ave., Princeton, W. Va., will sell two AF train sets, new, complete with transf., track, etc.

RICHARD PEDLER, 814 Sixth St., Muskegon Heights, Mich., has comp. HO outfit: 5 cars, 20 secs. curved track, 14 secs. str. track, 4-6-4 loco and 2 manual switches to trade for either Lionel or AF 0-6-0 loco, O-gage cars, tracks.

GLEN PETERSON, 928 Dwight St., Kalamazoo 16, Mich., will sell 16 sections AF curved HO track, $4. Has magazines to trade: *Modelmaker*, '25, '28, '34, '35, '36, '38, '39, '40; *Model Builders*, *Min. Railroading*, *Model Craftsman*. What have you?

E. E. RODGERS, Box 792, R.R. 1, East Moline, Ill., will sell Lionel eqpmt. costing him $200. Write for list.

GEO. SAVAGE, 1301 W. Boone Ave., Spokane 12, Wash., will buy Buddy L wreck derrick; also caboose or loco, same make.

FRED E. SCHORR, Jr., 1732 West End Ave., Pottsville, Pa., will buy all kinds OO gage eqpmt.

E. A. SNELL, 142 Ballou Ave., Dorchester, Mass., will sell AF, Ives and Lionel items; 9½ AF frt. car, Ives 6½ frt. and pass. cars, O and 027 str. and curved track.

JACK E. STRANGER, 1424 S. Ash, Spokane, Wash., will trade 12-in. telescope mirror, prism and eyepieces for O-gage 2-rail scale eqpmt.

CHAS. SUIT, 105 Zabriskie St., Jersey City, N. J., offers 2 prs. O-gage scale trucks, complete scale flatcars and Sinclair oil tank body kit in exchange for HO loco. Will sell 75 copies of *Railroad Magazine*, '33-'43. Send for list.

HARRY A. SUMMERS, 1435 Ashland Circle, Norfolk 5, Va., will buy Lionel locos 226, AF 43226, 43224; Ives loco 1694; cond. of motor unimportant.

E. M. WRIGHT, Box 246, Croydon, Pa., will buy HO locos; state makers' name, price, and cond.

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OH DON'T LET IT BOTHER YOU, LITTLE BOY!
DARN IT! I'M SICK AND TIRED OF BEING A SCARECROW! CHARLES ATLAS SAYS HE CAN GIVE ME A REAL BODY. ALL RIGHT! I'LL GAMBLE A STAMP AND GET HIS FREE BOOK!
BOY! IT DIDN'T TAKE ATLAS LONG TO DO THIS FOR ME! WHAT MUSCLES! THAT BULLY WON'T SHOVE ME AROUND AGAIN!
LATER
WHAT! YOU HERE AGAIN? HERE'S SOMETHING I OWE YOU!
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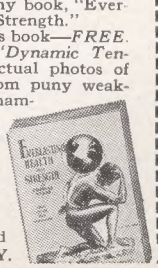

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